

Open Research Online

The Open University's repository of research publications and other research outputs

Nurses' Personal and Professional Experiences of Dyslexia in Lifelong Learning: a Narrative Approach

Thesis

How to cite:

Major, Rachael Louise (2017). Nurses' Personal and Professional Experiences of Dyslexia in Lifelong Learning: a Narrative Approach. EdD thesis The Open University.

For guidance on citations see [FAQs](#).

© 2016 The Author



<https://creativecommons.org/licenses/by-nc-nd/4.0/>

Version: Version of Record

Link(s) to article on publisher's website:

<http://dx.doi.org/doi:10.21954/ou.ro.0000c4e4>

Copyright and Moral Rights for the articles on this site are retained by the individual authors and/or other copyright owners. For more information on Open Research Online's data [policy](#) on reuse of materials please consult the policies page.

oro.open.ac.uk

Nurses' Personal and Professional Experiences of Dyslexia in Lifelong Learning: a Narrative Approach

Rachael Major MA (HE), BSc (Hons), RN (Adult)

Open University

Doctorate in Education

June 2017

Acknowledgements

Firstly, I would like to thank my participants without whom I would not have been able to complete this thesis. Their candour was enlightening and at times emotional.

I would like to thank my supervisors Professor Josie Tetley and Dr Angela Srivastava for their guidance and support throughout the process and for helping me to develop as a researcher and in confidence.

I am grateful for the virtual support offered by the members of the Facebook groups PhD and Early Career Researcher Parents and Virtual SUAW – Parents Edition who were there for encouragement and shared experiences. I also need to thank Rachel for proofreading, listening to repeated summaries of my thesis and keeping me calm before my viva.

Finally, I want to thank my children Ben and Oliver for inspiring me to start this Doctorate while making the completion more of a challenge and for my husband Mark for his unwavering support; without him, this would not have been possible.

Contents

Acknowledgements	2
Abstract.....	8
Chapter One: Introduction	9
Introduction.....	9
Lifelong Learning	10
Nursing and Lifelong Learning.....	12
Dyslexia.....	14
Nursing and Dyslexia	17
Planned Research	18
Initial Research Questions.....	19
Thesis structure	20
Summary	21
Chapter Two: Literature review.....	22
Introduction.....	22
Lifelong Learning and Adult Education	22
Inclusive Teaching and Learning in Higher Education.....	25
Literature Search Strategy.....	30
Qualified Nurses with Dyslexia.....	31
Continuing Professional Development	33
Dyslexia and Higher Education.....	35
Professional requirements	37
Attitudes of teaching staff.....	38
Pre-registration Nursing.....	40
Experiences of Clinical Practice	41
Disclosure	44
Benefits of dyslexia	47
Summary	48
Chapter Three: Methodology	50
Introduction.....	50
Choice of Paradigm	50
Axiology	52

Choice of Research Methodology	54
Narrative Approach	54
Choice of Data Collection Methods	57
Data Analysis	64
Use of the Hermeneutic cycle	65
Validation of the themes.....	67
Summary	68
Chapter Four: Research in Action.....	70
Introduction.....	70
Context of the Research and Ethics	70
Initial Study.....	72
Approach for Main Study	76
Recruitment of Research Participants for the Main Study	76
Participant Profile.....	80
Data Collection and Analysis in Practice	83
Ethical issues	88
Summary	92
Chapter Five: Findings from Nurses.....	93
Introduction.....	93
Findings from Interviews with Nurses	93
Dyslexia and Impact on Learning	93
Role of parents and family.....	93
Role of teachers.....	96
Preferred Learning Styles	100
Learning Choices.....	102
Psychological Aspects.....	105
Dyslexia and Nursing	107
Career Choices	107
Effect on Practice.....	109
Compensatory Strategies	113
Decision to Disclose	118
Support from others.....	121
Summary	123
Chapter Six: Findings from Lecturers	125

Introduction.....	125
Findings from Interviews with Lecturers.....	125
Identification of Dyslexia.....	126
Role of the Lecturer	126
Recognising Dyslexia.....	127
Access to and Time to Assessment.....	130
Role of the Student.....	131
Impact of diagnosis.....	133
Support for Students with Dyslexia.....	134
Role of the Lecturer	134
Reasonable adjustments	136
Reasonable adjustments in Theory	137
Reasonable adjustments in practice	139
Specialist support	141
Summary	142
Chapter Seven: Synthesis of Findings	144
Introduction.....	144
Addressing the Research Questions.....	144
Personal Development.....	146
Emotional Impact of Dyslexia	146
Personal Compensatory Strategies	149
Self-Development	153
Professional Development	155
Transitions	155
Support and Disclosure.....	157
Maintaining Safety.....	162
Rigour	164
Summary	166
Chapter Eight: Conclusions and Recommendations	168
Introduction.....	168
Methodological considerations.....	169
Implications for Lifelong Learning and Education for Registered Nurses with Dyslexia	170
Key Conclusions.....	174
Limitations.....	175

Implications of My Research on My Practice	176
Recommendations for Policy, Practice and Research.....	177
Policy.....	177
Practice	179
Research	181
Summary	182
References	183
Appendix One: Ethical Approval	203
Appendix Two: Information for Participants and Consent Form.....	212
Appendix Three: Template Analysis.....	218
Appendix Four: Screenshots of Asynchronous Online Discussion Forum Pages.....	222

Tables and Figures

Table 1: Initial Study Participant Details	72
Table 2: Information about Nurse Participants	81
Table 3: Information about Lecturer Participants	82
Table 4: Themes from Nurse Interviews.....	94
Table 5: Themes from Lecturers	125
Figure 1: Hermeneutic cycle (Adapted from Avesson and Skoldberg (2009, p134) with Bengtson et al. (2005)).....	67
Figure 2: Overview of Ethical Approval.....	71
Figure 3: Initial Study Themes.....	75
Figure 4: Overview of Research Protocol for Main Study	76
Figure 5: Dyslexia and Learning Sub-themes.....	107
Figure 6: Dyslexia and Nursing Sub-Themes.....	123
Figure 7: Identification of Dyslexia Sub-themes	134
Figure 8: Support for Students with Dyslexia Sub-Themes	142
Figure 9: Common Themes from Qualified Nurses and Lecturers	143
Figure 10: Model of Effects of Dyslexia on Nurses	145

Abstract

This study investigated how dyslexia affected qualified nurses' lifelong learning and how they engaged in professional development; a requirement of registration. It considered the educational and professional experiences of nurses and lecturers who had supported registered nurses with dyslexia.

A qualitative, in-depth, narrative lifecourse approach was used with participants across Great Britain. The initial study informed the conduct of the main study and interview questions. The main study involved fourteen registered nurses and nine lecturers recruited purposefully through posters and Twitter. Semi-structured interviews were conducted either face-to-face, by telephone or using Skype. Data were analysed using template analysis and validated by the participants using asynchronous online discussion forums.

The analysis of the data identified that dyslexia affected nurses in their professional capacity, as well as affecting their learning. The findings further identified how nurses developed compensatory strategies both personally and in practice seeking to overcome negative learning experiences. Transitions were particularly problematic, either between academic levels or practice areas. Disclosure of dyslexia was dependent on supportive relationships. However, patient safety was seen as paramount. Lecturers recognised that early identification of dyslexia was important to enable appropriate support and reasonable adjustments, but is dependent on recognition of dyslexia.

The findings of the nurses' and lecturers' data were used to develop a conceptual framework to illustrate how both personal and professional development overlap but are also influenced by psychological and social factors. Recommendations from the study note that professional development is required for lecturers to ensure early recognition and support for nurses with dyslexia, along with early formative assessment of written work at university. However, education beyond initial training also needs to take account of the personal impacts of dyslexia and the effects of transitions should be factored into inclusive assessment strategies and support available.

Chapter One: Introduction

Introduction

Nurses are required to continue their education throughout their careers to maintain their knowledge and skills to protect patient safety (Nursing and Midwifery Council, 2015a). Nurses cannot rely on the knowledge and skills gained during their initial training due to the rapid pace of change within healthcare, and therefore this study is framed within the context of lifelong learning in nurse education. This chapter will introduce the concept of and explore the political influences on, lifelong learning since the latter part of the twentieth century. However, it is not the aim of this thesis to review the broader conceptualisation of lifelong learning, but work presented does explore the role of lifelong learning in the professional development of nurses.

Consequently, the chapter will proceed to explore how initial nurse education and continuing professional development (CPD) has changed for nurses in the last 30 years.

For the last fifteen years, my role has been to support both pre-registration nursing students and registered nurses through higher education. During that time, I have identified many learners who have struggled academically when it is apparent through discussion that they have the knowledge and skills to achieve the course requirements and on further investigation were found to be dyslexic. It was these experiences, which caused me to want to investigate further how dyslexia affected nurses. This chapter will discuss the concept of dyslexia and the definition that will be used in this study. It will suggest why dyslexia may have an effect on nurses and how they engage with lifelong learning. Finally, this chapter will outline the research questions that guided this research and the structure of the thesis.

Lifelong Learning

As this study is framed in the context of lifelong learning, it is logical to introduce this concept first. In nursing, lifelong learning would be termed continuous professional development after qualifying as a nurse. This was formalised by the United Kingdom Central Council for Nursing, Midwifery and Health Visiting (UKCC), the predecessor to the current nursing regulatory body in 1994 (UKCC, 1994). However, lifelong learning is not a new concept. Indeed the concept appeared in the literature post-World War I with an increase in workers' rights and women's suffrage (Wilson, 2009). Following World War II, lifelong learning was seen as a way of rebuilding society, although the notion of lifelong learning as something that is beneficial to individuals and society has had a mixed response (Knapper and Cropley, 2000). While interest in the concept continued during subsequent years, this increased during the 1970s with a report from the United Nations Educational, Scientific, and Cultural Organisation (UNESCO) proposing a 'learning society' with lifelong education to allow all citizens to participate fully (Faure et al., 1972). This was in keeping with a humanistic philosophy where lifelong learning was seen as a means of personal development and self-fulfillment (O'Grady, 2013). This initiative was not supported by government action, with criticism from educationalists due to a lack of a research base for the claimed benefits (Knapper and Cropley, 2000).

During the 1990s there was a resurgence of enthusiasm for the concept of lifelong learning within the United Kingdom (UK) and the European Union, due to high levels of unemployment attributable to a worldwide recession and the need to remain competitive in the global marketplace (Department of Education and Employment, 1999). Lifelong learning was viewed by the government as a way of achieving economic

development and adapting to the speed of change in society, with those participating better able to support themselves with less burden on the state (Organisation for Economic Cooperation Development, 1996). Widening participation in post-compulsory education by underrepresented groups such as those with disabilities was also high on the political agenda (Hurst, 1992). However, from a critical theory perspective, Brine (2006) argues that rather than enabling social inclusion and narrowing the gap between disadvantaged and advantaged groups in society, lifelong learning encourages competition, stratification and widens the power imbalance.

The historical development of lifelong learning has also contributed to it being defined and understood in several ways (Edwards et al., 1998). For example, lifelong learning has been defined as a very broad and comprehensive idea which “includes all formal, non-formal and informal learning (whether intentional or unanticipated) which occurs at any time across the lifespan” (Candy et al., 1994 p xi). The Organisation for Economic Cooperation Development (1996) include all conscious learning throughout the lifespan in their definition. However, other authors define lifelong learning as only including informal learning, with lifelong education addressing formal learning (Jarvis, 2006). Informal learning is learning which is generally non-certified and resulting from daily life or work activities (European Commission, 2001) and would include experiential learning (Nicoll and Fejes, 2011). For the purposes of this study, the definition from Candy et al. (1994) will be used as CPD for nurses includes all types of learning (Nursing and Midwifery Council, 2015c).

Nursing has developed within the context of the shift towards lifelong learning; the

initial educational requirements for registration have increased, along with a requirement to demonstrate evidence-based practice (Willis Commission, 2012). These changes and requirements will be discussed in the next section of this chapter.

Nursing and Lifelong Learning

Nurses work in a health system in which the needs of patients are increasing, and they are required to maintain their competency (Govranos and Newton, 2014) in a changing landscape, with continued learning required beyond the point of initial registration as a nurse (Nursing and Midwifery Council, 2015c). In nursing, lifelong learning could be seen as engaging in learning beyond initial registration and engaging in CPD (Purdy, 1997).

It could be argued that nurses have always engaged in lifelong learning, with Florence Nightingale advocating that nurses learn from experience and from other disciplines (Nightingale, 1860). The moves towards the professionalisation of nursing during the 1980s and 90s sought to expand nursing knowledge through research and evidence-based practice, reducing the emphasis on training and increasing the importance of education (Jarvis, 2005). However, the focus on education and learning for nurses changed most significantly in 1995 when nurse education moved entirely out of schools of nursing and the apprenticeship style of training, into higher education institutions (Burke, 2006). The new minimum academic qualification was a diploma in nursing. Alongside this change, the two-year Enrolled Nurse programme was also phased out, and a programme of education was offered to enable these nurses to 'convert' to become registered nurses (Dearnley, 2006). Today there are still Enrolled Nurses who have not converted and are now termed second level Registered Nurses with few

restrictions on their practice. However, there are some accounts of second level registered nurses feeling that their career progression and career satisfaction has been affected by their level of training (Dearnley, 2006, Foord, 2012). Indeed, second level nurses are unable to assess student nurses in their final placement as competent to enter the nursing register (Nursing and Midwifery Council, 2012a) or gain admission to the Specialist Community Public Health Nurses Programme (Nursing and Midwifery Council, 2012b). These restrictions have arguably limited their opportunities to engage in some aspects of lifelong learning in nursing. While the majority of second level nurses are coming up to retirement (Dean, 2010), those who are still practicing, and have not accessed higher level study will lack the academic qualifications that are generally required for promotion (Joyce and Cowman, 2007) or access to advanced practice programmes which are now at Masters level (Ryley and Middleton, 2015).

As nurse education moved into Higher Education, the Project 2000 curriculum that emerged in the early 1990s was heavily criticised by employers and the public for producing nurses who did not possess the practical skills that were expected at the point of registration, with the curriculum seen as being too academic (UKCC, 1999). Project 2000 was replaced by the “Making the Difference” curriculum (Department of Health, 1999). This was introduced at the same time as an extensive inquiry into children’s cardiac surgery at the Bristol Royal Infirmary which also criticised education of health care professionals, including nurses, as concentrating too much on technical skills and not enough on communication, learning with other health professionals, leadership and team working (Bristol Royal Infirmary Inquiry, 2001). The aim of this new curriculum was

to strengthen the role of nurses within the health care system and to enhance career development, promoting the value of lifelong learning (Department of Health, 1999).

While the move to becoming an all graduate profession and associated curriculum changes have impacted on some of the reasons for nurses engaging in learning beyond their initial registration, there are also more formal professional regulations that nurses are expected to meet. Nurses are required to re-register with their regulatory body every three years and to have undertaken at least 35 hours of CPD during that time (Nursing and Midwifery Council, 2015c). The current pre-registration curriculum is now at degree level (Nursing and Midwifery Council, 2010b) and therefore CPD requirements for nurses are also changing. There has been a move from practical courses, such as those provided by the English National Board¹ (ENB), to top up degrees, Masters, Professional Doctorates and PhD's, with higher level educational qualifications increasingly required for promotion (Jasper and Mooney, 2013). These increasing educational requirements for CPD, while challenging for all, may prove to be more difficult for a nurse with a Specific Learning Difficulty such as dyslexia.

Dyslexia

Dyslexia can be seen as a controversial topic as there are arguments regarding its existence (Elliott and Gibbs, 2008), as well as the particular definition and differences associated with the condition (Rice and Brooks, 2004, Fletcher, 2009). Dyslexia is a Specific Learning Difficulty or Difference (SpLD) which affects around 10 percent of the

¹ The English National Board was one of the four regional bodies set up in 1983 to ensure the quality of nursing and midwifery education courses in the UK. It was disbanded in 2002 with the introduction of the Nursing and Midwifery Council.

population, 4 percent severely (British Dyslexia Association, 2012b). It is not known how many nurses have the condition (Sanderson-Mann and McCandless, 2005). However, research has shown that people with dyslexia might be drawn to people-orientated careers with a higher practical component and less structure than an office based profession (Taylor and Walter, 2003). This way of working suits many with dyslexia (Bartlett et al., 2010), so the number of nurses with dyslexia might be higher than the general population. Although there are many definitions of dyslexia (McLoughlin and Leather, 2012), it is generally accepted that it primarily affects skills in accurate and fluent word reading and spelling, causes difficulties in phonological awareness, verbal memory, and verbal processing speed and occurs across the range of intellectual abilities (Rose, 2009). However, other definitions of dyslexia also note that “co-occurring difficulties may be seen in aspects of language, motor co-ordination, mental calculation, concentration and personal organisation, but these are not, by themselves, markers of dyslexia” (Rose, 2009 p10). Recognising the complexity of dyslexia, the British Dyslexia Association (2012a) add that some individuals also experience visual processing difficulties and a combination of abilities and difficulties that affect the learning process. They also suggest that some individuals show strong creative, problem-solving, interactive, oral and design skills (British Dyslexia Association, 2012a).

Dyslexia is classed as a disability under the UK Equality Act (2010) and therefore people with dyslexia cannot be discriminated against when seeking employment, promotion or education (Brunswick, 2012). In fact, they are legally entitled to receive accommodations in the form of reasonable adjustments to support them in work and

education (Brunswick, 2012). Despite this, Fitzgibbon and O'Connor (2002) argue that people with dyslexia are disabled by the system, especially through school and that they lose their identity through being labelled as disabled. However, it has been argued that those adults who have made it as far as university have managed to overcome some of these barriers (Brunswick, 2012). The UK statistics showed that 5.14 percent of students in their first year at university in 2014/5 declared that they had a specific learning difficulty, which would include dyslexia, a 1.74 percent increase on 2009/10 (Higher Education Statistics Agency, 2016). In addition, there is also evidence of a significant number of students only being identified as having dyslexia once at university (Singleton et al., 2009) which could be due to the increasing academic requirements. This has been shown in nursing with a study of disabled nursing students including students with dyslexia finding that third-year students required more support than at any other time in the course (Tee et al., 2010).

While there are debates about the existence and nature of dyslexia, it is acknowledged that dyslexia is a lifelong condition, which affects literacy and learning (Reid, 2009).

While some people are able to overcome these differences, it is often not without a considerable amount of additional effort (Pavey et al., 2010). For some individuals with dyslexia their experiences at school would not have been particularly positive (Alexander-Passe, 2006), however, many will develop their literacy skills later in life (Pavey et al., 2010). Many jobs are now requiring higher levels of literacy, and academic qualifications and careers for life are becoming more of a rarity (Davies, 1999). People are likely to be required to engage in learning throughout life to keep pace with the

changes in the workplace (Bartlett et al., 2010) and this is particularly relevant for nursing, where the pace of change has been particularly high (Willis, 2015).

Nursing and Dyslexia

As noted earlier in this chapter, dyslexia is a disability recognised by the Equality Act (2010) and therefore both employers and Higher Education Institutions are required to make reasonable adjustments to enable nurses with dyslexia to practice effectively and not be disadvantaged by their disability. Reasonable adjustments are controversial in the field of healthcare, with much debate as to what they should entail (Price and Gale, 2006, Sanderson-Mann, 2006, Tee et al., 2010). In terms of the challenges that dyslexia can bring to learning, in the context of nursing practice, issues of patient safety have been raised, although in my experience as a nurse and a nurse educator, these have been mostly anecdotal, particularly in relation to drug administration. When I explored this concern further, an initial search of the literature produced only one piece of research where the drug administration skills of nurses with dyslexia had been tested (Millward et al., 2005). However, this research only looked at whether a group of students and some qualified nurses could match the patient with the correct drug as part of a memory test. As difficulties with working memory are known to be an issue for many with dyslexia (Kibby and Cohen, 2008, Reid, 2009), this could be regarded as an inappropriate test. Nurses do not memorise and match drug names with patients, instead for safe practice they complete a multistage process which includes checking the patient's identity against a drug chart (Nursing and Midwifery Council, 2007, Ansell and Dougherty, 2011).

To explore the background surrounding professional concerns about dyslexia in practice, I undertook a search of the Nursing and Midwifery Council website. This search identified 30 cases that had been brought to the Fitness to Practice Committees in the last five years, where dyslexia had been cited as an issue or contributory factor (Nursing and Midwifery Council, 2016). These outcomes of these cases resulted in a variety of sanctions including suspension and striking off of the register and the end of the nurse's career. While this is a fairly low number relative to the total number of referrals to the NMC about fitness to practice - 5541 in 2014-15 (Nursing and Midwifery Council, 2015d) it illustrates the point that dyslexia can continue to be a problem for registered nurses, although the full extent is unknown. While dyslexia is seen as a problem in the context of the nursing workplace, Brunswick (2012) argued that most people with dyslexia can function very well within the work environment using compensatory strategies, although these strategies may not be so effective when they are subject to stress. The anxiety experienced by newly qualified nurses is also well documented, with new graduates fearing that they would be exposed as incompetent, practice in an unsafe manner and not be able to cope with their new roles and responsibilities (Duchscher, 2009). Benner (2001) suggests that it takes 2-3 years for a nurse to feel that they can master the many contingencies that might arise in clinical practice and therefore levels of stress may be higher during this time, along with associated difficulties posed by dyslexia.

Planned Research

Having undertaken this background work, the purpose of this research study was to investigate how nurses have experienced having dyslexia and the impact that this has

had on their careers and professional development, to gain a greater understanding of this experience and how nurses with dyslexia can be supported. The aim was to ensure that my research could be used in the real world of nursing for the benefit of nurses with dyslexia, their professional development, and ultimately the patients that they care for. At the start of my research, I had planned to include both pre-registration students and registered nurses. This was initially due to my concern that I would be unable to access enough registered nurses locally to make the research viable. However, as the literature review progressed, it became clear that there is an increasing body of evidence about the effects of dyslexia on the experiences of student nurses, while only two studies focused on registered nurses (Illingworth, 2005, Morris and Turnbull, 2007b). Dyslexia is a lifelong learning difference (Reid, 2009) and learning occurs throughout life (Laal, 2012). As the planned research encouraged the registered nurses to reflect on their experiences throughout lives, including their initial pre-registration training, the inclusion of student nurses within this study would not make a significant contribution to the study aims. As the support of lecturers within higher education is crucial to the success of any learner and arguably more so for those with dyslexia (Mortimore, 2013), I therefore decided that incorporating their views would add to the richness of the research and help with the triangulation of data, thus increasing the credibility of the research (Tracy, 2013).

Initial Research Questions

Following an initial review of the literature and background issues relevant to the development of the study, the following research questions were formulated:

- How has dyslexia affected qualified nurses?

- How has dyslexia affected qualified nurses' engagement with learning?
- What strategies are effective in supporting qualified nurses with dyslexia?

Thesis structure

This thesis has been developed from the research presents findings from a study of the experiences of registered nurses with dyslexia, as well as lecturers who have supported registered nurses with dyslexia in higher education. The study is situated within the concept of lifelong learning, and therefore Chapter Two initially critiques the contemporary theories of lifelong learning before critically analysing the research conducted around nursing and dyslexia. Due to the limited amount of literature available, research from comparable professions is also considered, including medicine, allied health professions, and teaching. Chapter Three articulates the methodology and research methods chosen, identifying my epistemology and ontology and linking these to my chosen theory of lifelong learning. Chapter Four demonstrates how these methods have been applied in practice and how challenges during the research process have been overcome. It also presents the finding of the initial study that tested out the methodology and methods used to explore these research questions. Chapter Five presents the findings from the nurses within the study, demonstrating the effects of dyslexia on them as nurses and on their learning. Chapter Six presents the findings from the lecturers, highlighting the need for identification of dyslexia as well as support required. Chapter Seven synthesises the findings of the research, drawing on existing knowledge within the field of dyslexia, as well as presenting a model of how dyslexia might affect the lifelong learning of nurses with dyslexia. Chapter Eight draws

conclusions from the research and makes recommendations for policy and practice, as well as further research.

Summary

This chapter has introduced both dyslexia and lifelong learning and how dyslexia might impact on the practice and learning of registered nurses. It has situated those nurses in the context of lifelong learning, discussing the requirements for continuing professional development. Having reviewed the background literature my initial thoughts on the research were to consider how registered nurses with dyslexia engage in lifelong learning and how having dyslexia affected them. I was interested in what impact having dyslexia had on their learning both in practice and the classroom and what compensatory strategies they had developed. I was also interested in how as a nurse educator I could best support nurses with dyslexia and how other lecturers have experienced this within their own universities. To identify what research has been conducted about the effects of dyslexia on nurses, a review of the literature has been conducted, and this will be presented in the next chapter.

Chapter Two: Literature review

Introduction

The literature review is an important step in any research process as it will help to justify the research, as well as giving a broader understanding of the subject matter (Hart, 1998). The literature review will help to define the concepts relevant to the aims of my research, enabling me to demonstrate the current state of knowledge within my field of research, identifying a gap in the knowledge that will be explored. As my research questions explore the engagement of qualified nurses with learning throughout their lives, the following chapter will initially draw on theories of lifelong learning and adult education that are pertinent to nurses as adult learners. As nursing with dyslexia draws on the context of engagement in higher education with a disability, literature around inclusive teaching and learning will also be reviewed. The chapter will then proceed to outline the search strategy used to identify the literature regarding dyslexia within the context of nursing and related professions and present a critical analysis of that literature and how this has influenced the research questions within my study.

Lifelong Learning and Adult Education

As illustrated in the introductory chapter, nurses are required to continue their learning after qualification, but there are many ways that this can be achieved. Learning is a very complex phenomenon, and it would be impossible to address every theory proposed about how learning occurs and the most effective way for educators to support that process. What I will try to address in this chapter are the more contemporary theories that could be attributed to lifelong learning, especially in relation to nursing. While arguably relevant to lifelong learning, theories of childhood development and classical

theories of learning will not be addressed, partly due to the limitations within the scope and word count of this thesis and partly as many of the classical theories have been developed or incorporated into the more contemporary approaches (Illeris, 2009b).

The philosophical background to lifelong learning is debated, with Wain (1987) suggesting that the dominant theories are a combination of humanism and pragmatism, although critical theorists would argue this perspective as negating the role of education in influencing societal norms (Nicoll and Fejes, 2011). Current approaches to nurse education have maintained those links to humanism, where the individual is encouraged to learn and develop to reach their potential (Purdy, 1997, McIntosh, 2011), and pragmatism, where the individual nurse is encouraged to reflect and problem solve (Howkanson Hawks, 1992, Kasper, 1995). Knowles et al. (2012) suggest that adult learners are self-directed, with an internal motivation for learning. Adult learners build on previous experiences (Knowles et al., 2012) and experiential learning has become the core of many of the theories of learning (Jarvis and Cook, 2010). This is particularly pertinent to my research where the nurses all have engaged in learning both at school, university and in practice. Dewey was one of the first theorists to have 'experience' as central to learning (Jarvis and Cook, 2010), with the term experience being a set of interconnected situations rather than one situation (Elkjaer, 2009). The work of Kolb is often cited within the nurse literature as nurses are required to reflect on their experience and to use that reflection as a basis for new learning (Poore et al., 2014). Despite the acknowledgement that experience is an important part of learning, especially in nursing practice, Kolb's experiential learning theory has been criticised as

being too simplistic (Jarvis and Cook, 2010) and that often the learning experience is seen in isolation without considering other influencing factors (Elkjaer, 2003).

The impact of social interactions on learning has also been included in many of the more contemporary learning theories that are pertinent to my research as the qualified nurses learn within the context of nursing, previous experiences and also how society views dyslexia. Wenger's (2009) social theory of learning suggests that learning is as a result of active engagement with the world and that learners will identify what is valued within society and concentrate on this aspect. In terms of my study, this theory would suggest that nurses would prioritise learning that was valued by those that they were influenced by, such as managers and peers. Both Lave and Wenger emphasised the importance of practice-based learning as learning situated within the social context (Lave, 2009) and the development of 'communities of practice' where social participation is integrated into the process of learning (Wenger, 2009). While widely used within nursing where the culture of the practice environment is seen to influence learning (Walker et al., 2011), these theories have been criticised for neglecting the role of the individual's learning and cognitive abilities (Yakhlef, 2010). It is also argued that both internal and external barriers to learning, such as specific learning difficulties, preferred learning styles and cultural differences are not addressed within these theories (Illeris, 2009a). Gardner's (2009) theory of multiple intelligences, suggests that each learner has a different approach to learning and that they have a different set of interests, strengths and ways of processing information. Alheit (2012) suggests that lifelong learning occurs across the lifecourse and that education is a biographical process, with learning taking place not only in educational establishments and workplaces but through life experiences, crises,

and transitions. Thus, both the social approach to learning with others and the cultural and educational influences are integrated with the individual, cognitive and emotional aspects of learning (Alheit, 2009). To understand those influences, Alheit (2005) espouses the use of narratives to explore the individual's interpretation of lifelong learning, something that Field (2012) suggests as a way that individuals can learn from their experiences. The use of narratives will be explored further in the methodology chapter of this study.

Having reviewed some of the theories of lifelong learning, it can be seen that previous experiences, social circumstances, individual cognitive and emotional differences all impact on the way that adults experience learning. As nurses with dyslexia may then experience education and practice as adult learners in different ways, this is a complex phenomenon. According to the social model of disability, it is not dyslexia itself that causes a disability but rather societal and institutional barriers (Oliver and Barnes, 2010). Despite the widening participation agenda, as discussed in the introductory chapter of this thesis, a pervasive difference continues in the degree attainment and employment outcomes of disabled and non-disabled students (Social Mobility Advisory Group, 2016). This, along with changes to the funding of Disabled Student Allowance (GOV.UK, 2016b), has raised the profile of inclusive teaching and learning in higher education (Disabled Students Sector Leadership Group, 2017) and this will be addressed in the next section of this chapter.

Inclusive Teaching and Learning in Higher Education

The basic premise of inclusive learning and teaching is to remove barriers to participation in higher education so that all students can fully participate in learning and

achieve their potential (Hockings, 2010). While this has been debated for a number of years, it could be argued that it has been slow to become established within the higher education sector (Gibson, 2015). Inclusive teaching and learning promotes the concept that all learners have different strengths and weaknesses which should be considered in “curriculum design, curriculum delivery, assessment and institutional commitment to and management of inclusive learning and teaching” (Thomas and May, 2010 p.9).

Diversity can be seen as a benefit in education and enrich society as a whole (Moriña, 2017) with Healey et al. (2006) suggesting that we should start from the assumption that everyone is impaired in some way and all would benefit from inclusive approaches.

Inclusive approaches to assessment have been shown to increase student satisfaction and grades, although took more of the lecturer’s time to implement (Waterfield and West, 2008). This research was a case study in a single UK university, however, it is one of the few evaluative studies on inclusive approaches to teaching and learning. Students in a qualitative study in Northern Ireland identified that they preferred methods of assessment that did not require reasonable adjustments that could be disclosive to other students (Redpath et al., 2013).

Inclusive learning and teaching is based on the social model of disability, but disability legislation could be argued to have come from a medical model, with the Equality Act (2010) focusing on a deficit model requiring reasonable adjustments to be implemented to enable those with disabilities to fit into the curriculum (Pleasance, 2016). Many studies have emphasised difficulties that students have found in accessing reasonable adjustments at university (Fuller et al., 2004b, Dalun et al., 2010, Equality Challenge Unit, 2010, Zhang et al., 2010). However, an inclusive approach does not mean that

students should not have reasonable adjustments, rather a shift to meeting the needs of the majority so that few adjustments would be required (Halligan and Howlin, 2016, Disabled Students Sector Leadership Group, 2017). This would be particularly beneficial to students who have not disclosed a disability or have not been assessed to meet Disabled Student Allowance requirements (Wray et al., 2012a). In a case study of a London university, Masterton (2010) suggested that there was a focus on individual adjustments and an awareness of the legislation, although staff had not embraced inclusive education. It has been argued that inclusive education benefits all through effective teaching and learning methods (Moriña, 2017), as well as being ethically right (Bolt, 2004, Bleich et al., 2015, Reindal, 2016). Inclusive approaches may also be more cost effective, as the number of individual accommodations required for students is reduced (Disabled Students Sector Leadership Group, 2017). It has also been argued that these approaches enable students to become more independent lifelong learners, especially with the use of technology (Tonge and Treanor, 2017).

A model of inclusive education which was devised in the United States (US) is Universal Design for Learning (UDL), although it is also termed Universal Design for Instruction (UDI) and Universal Instructional Design (UID) (CAST, 2011). The principle of UDL is to address variability between learners by developing a flexible curriculum using three principles: “provide multiple means of representation, provide multiple means of action and expression, and provide multiple means of engagement (CAST, 2011 p 5). In this way UDL allows students to engage in learning and demonstrate their understanding in a way that suits them, reducing the need for individual accommodations (Halligan and Howlin, 2016). There is an increasing body of literature about the implementation of UDL,

especially in the US (Scott et al., 2003, Orr and Hammig, 2009, Lombardi and Murray, 2011, Lombardi et al., 2011, Smith, 2012, Mole, 2013) and Ireland (Heelan et al., 2015, Tonge and Treanor, 2017), with evidence that it is emerging in Australia (Hitch et al., 2015) and at least one university in the UK (Disabled Students Sector Leadership Group, 2017). However, as the studies are mainly descriptive, there is very little evidence to demonstrate how effective UDL is (Pliner and Johnson, 2004, Atkinson, 2012, Mole, 2013, Rao et al., 2014). This could be because UDL is relatively new and still being defined (Rao et al., 2014) and not fully embedded in practice (Fovet, 2017).

Hitch et al. (2015) conducted a review of publicly available university policies, along with a survey of universities investigating the practice of inclusivity in Australia. They found that one-third of universities included inclusive teaching and learning in their policies, with one referring to UDL. However, there was a wide range of training for staff on inclusivity with online training and one-off workshops at staff induction being most common (Hitch et al., 2015). Despite the increasing prominence of inclusive education as a philosophy, a Spanish study by López Gavira and Moriña (2015) demonstrated that policies were not always implemented in practice and that attitudes of lecturers were a common barrier. This was supported by many other studies from the US and Europe (Hanafin et al., 2007, Zhang et al., 2010, Black et al., 2014, Strnadová et al., 2015, Morgado et al., 2016), with students finding lecturers reluctant to use inclusive technology (Moriña et al., 2015, van Jaarsveldt and Ndeya-Ndereya, 2015). One mixed methodology case study of a UK university even identified a discourse that inclusive practices might compromise academic standards (Mortimore, 2013). Inclusive approaches were also seen to interfere with the competitive nature of assessment with

reasonable adjustments seen to give an unfair advantage to some students (Hanafin et al., 2007). Students with a disability were seen as the responsibility of disability services (van Jaarsveldt and Ndeya-Ndereya, 2015), with students with more visible disabilities being more accepted and accommodations agreed (Hanafin et al., 2007, Zhang et al., 2010, Magnus and Tøssebro, 2014, Strnadová et al., 2015). It has been argued that inclusive approaches that reduce the need for common individual accommodations may be more beneficial for these students which would include students with dyslexia.

Training in both disability awareness and inclusive education improved lecturers' attitudes but did not contribute to implementation in a survey of a US university (Lombardi et al., 2011). However, knowledge of inclusive practices or UDL was found to be a major barrier to implementation identified in many of the studies (Fuller et al., 2004a, Zhang et al., 2010, Mortimore, 2013, Redpath et al., 2013, Black et al., 2014, López Gavira and Moriña, 2015, Moriña et al., 2015, Strnadová et al., 2015, van Jaarsveldt and Ndeya-Ndereya, 2015). In a survey at a university in the US (Black et al., 2014), 71 percent of lecturers were not familiar with the principles of UDL but were willing to accommodate the changes to teaching and learning required. The more experience that they had with UDL the more positive their reaction was to inclusive approaches. However, the length of teaching experience has been found to negatively correlate with willingness to adopt inclusive teaching and learning strategies in a number of studies (Lombardi and Murray, 2011, Levey, 2016a) with lecturers reverting to custom and practice (Moriña et al., 2015).

Gibson (2015) suggests that inclusive education has failed and that education needs to allow for difference in order to bring about understanding and acceptance of disability. However, from the literature review above, I would argue that inclusive education does allow for difference but truly inclusive education has yet to be fully implemented, therefore cannot be seen to have failed. Inclusive learning and teaching requires commitment from universities at all levels so that policies and practice are congruent (Disabled Students Sector Leadership Group, 2017), enabling students to achieve a qualification that equips them for life outside university. The next section of this chapter will systematically review the research literature available about dyslexia and nursing, with further consideration of inclusive education incorporated into that review.

Literature Search Strategy

A search of the databases CINAHL Plus with Full Text, Medline with Full Text, Psychology and Behavioural Sciences Collection, SocINDEX with Full Text, ERIC, Cochrane Register of Clinical Trials Academic Search Complete, British Education Index, Education Abstracts (H.W. Wilson), Education Research Complete, ERIC, PsycINFO, UK & Ireland Reference Centre, AMED - The Allied and Complementary Medicine Database and Cochrane Database of Systematic Reviews with the keywords nurs* and dyslexi*, with the limiter research articles, gave a total of 76 hits, ranging in date from 2015 to 1966. Of those, fourteen were identified as describing research, with one not specifying nursing and another analysing a learning resource. A search of Google Scholar with the same search terms resulted in a further three research articles. Due to the paucity of research, the search was widened to include professions allied to medicine, medicine, and teaching as comparable professions. This search resulted in one research article referring to dyslexia

and radiography students, one relating to chiropractic students, one referring to occupational therapists, one with physiotherapy students, three from a social work background, five referring to medical students, three researching a variety of healthcare professionals, five reviewing the experiences of teachers or student teachers and one article reporting research into teaching and allied healthcare professionals. A further search using the term nurs* and disab* revealed another seven articles which included references to dyslexia. A search of EthOS resulted in two relevant doctoral theses, one of which was unobtainable but articles resulting from both theses were included in the literature found (White, 2007, Evans, 2014a, Evans, 2014b). The literature was reviewed using the CASP checklists (CASP UK, 2013) and the critiquing framework by Caldwell et al. (2011) as guidance. Common themes were then identified, and these are presented in the following sections of this chapter.

Qualified Nurses with Dyslexia

Of the 23 studies that included issues related to dyslexia in nursing (Kolanko, 2003, Sowers and Smith, 2004, Illingworth, 2005, Morris and Turnbull, 2006, Price and Gale, 2006, Sanderson-Mann, 2006, Morris and Turnbull, 2007a, Morris and Turnbull, 2007b, White, 2007, Rankin et al., 2009, Tee et al., 2010, Black et al., 2011, Child and Langford, 2011, Ridley, 2011, Carey, 2012, Sanderson-Mann et al., 2012, Wray et al., 2012a, Wray et al., 2012b, Ashcroft and Lutfiyya, 2013, Evans, 2014a, Evans, 2014b, Howlin et al., 2014, Ikematsu et al., 2014), only two investigated the experiences of qualified nurses (Illingworth, 2005, Morris and Turnbull, 2007b). Morris and Turnbull (2007b) conducted a survey using a postal and web-based questionnaire, which resulted in 116 respondents. Interestingly 79 of the respondents had been diagnosed after qualifying as

a nurse, which may be due to the self-selective nature of the sample, or the fact that the majority of the respondents had been qualified for more than 15 years and that the recognition of dyslexia has improved since they completed their initial training (Nichols, 2012). As the number of nurses with dyslexia is unknown (Morris and Turnbull, 2007b), it is difficult to identify whether the response rate from the survey was representative of the total population of nurses with dyslexia. However, the estimated rate of dyslexia in the general population is given as 4-10 percent (British Dyslexia Association, 2012a). As there are over 600,000 registered nurses in the UK (NMC 2008), the response rate from this survey would appear to be low. Other issues with the study include the fact that a text-based survey does not accommodate the literacy difficulties that a nurse with dyslexia may experience (British Dyslexia Association, 2012b) and also advertising within nursing journals assumes that nurses with dyslexia access this type of learning material.

The aim of the study by Morris and Turnbull (2007b) was to identify whether having dyslexia had affected the nurse's career progression, so the sample having more post-qualifying experience was appropriate. The majority of the respondents felt that they had been able to progress, but at a slower pace than their colleagues. The respondents further identified that this was partly due to lack of confidence, particularly in relation to obtaining academic qualifications (Morris and Turnbull, 2007b). The findings of Morris and Turnbull (2007b) are further supported by a much smaller qualitative study of five qualified nurses and two health care assistants by Illingworth (2005). Participants in this study felt that their career choices had been affected by having dyslexia and that there was a stigma associated with dyslexia (Illingworth, 2005).

Dyslexia is a lifelong condition (British Dyslexia Association, 2012a) and while many nurses with dyslexia will have developed strategies to compensate for their difficulties, there is very little literature on the individual strategies that might be used by nurses within practice and learning. Illingworth (2005) did present a table of strategies that participants had developed to overcome the obstacles that dyslexia caused them in everyday nursing practice. It was unclear whether these strategies were effective and used by all, as insufficient detail was given in the text. There is evidence, however, that transitions, either in education or job role are likely to challenge these strategies and cause more difficulties (Reid, 2009). Following the review of the literature, a research question has been formulated to investigate the broad issue of 'How has dyslexia affected qualified nurses' lives and development strategies over their careers?' The learning lives of qualified nurses are closely linked to continuing professional development and the literature identified on this topic will now be reviewed.

Continuing Professional Development

There is some literature on the attitudes of nurses to continuing professional development (CPD) and the influencing factors for engagement in study (Haywood et al., 2012, Brekelmans et al., 2013). However, there is little evidence of what types of lifelong learning nurses engage in or indeed the effects of dyslexia on the choices that nurses make when engaging in CPD. Bahn (2007b) identified that mandatory training was not seen as CPD but as a way of an organisation protecting itself. CPD was seen as a way of increasing skills to improve patient care, whereas academic study was seen as being necessary not to be left behind by students who were qualifying with higher academic

qualifications (Bahn, 2007a, Bahn, 2007b). This research was conducted with both first and second level nurses before the pre-registration nursing programme became an all-graduate programme, making this issue more acute. The literature reviewed so far has identified that previous experiences of learning influence nurses' attitudes to CPD (Hughes, 2005). Moreover, much of the literature has identified a lack of self-esteem in regards to learning in students with dyslexia (Burden and Burdett, 2005, Price and Gale, 2006, Gibson and Kendall, 2010, Evans, 2014a). As a result, it could be concluded that this may have an effect on how nurses with dyslexia engage in lifelong learning and if they choose formal, non-formal or informal learning.

Several studies identified that managers were the most important people influencing any nurses' decision-making around access to CPD, with managers acting as a gatekeeper to course admission (Hughes, 2005, Gould et al., 2007, Haywood et al., 2012) or influencing the perception of the value of CPD (Hughes, 2005). In the case of a nurse with dyslexia, the attitude of the manager to people with a SpLD may also have an enabling or disabling effect (Brunswick, 2012). The support that could be offered is dependent on disclosure, and this is affected by the attitudes of managers and colleagues to dyslexia (Gerber and Price, 2012). As previously discussed, dyslexia can be broadly viewed from two approaches, the medical model where dyslexia is seen as a condition with specific symptoms and restrictions, as opposed to a social model where the person is seen as disabled by society and that reasonable adjustments can overcome that disability (Chih Hoong, 2009). Managers may doubt the abilities of anyone with dyslexia due to lack of knowledge (Bartlett et al., 2010) and the approach to disability that both the manager and the person with dyslexia choose will affect their engagement

with and attitudes to learning (Morris and Turnbull, 2007b, Björklund, 2011). Further education for managers may have an enabling effect on nurses with dyslexia in practice and access to CPD. CPD for nurses could be accessed in the workplace but may require higher level study at university, and this was another theme identified within the literature, although mainly focusing on pre-registration students rather than CPD.

Dyslexia and Higher Education

While there is an increasing body of research on the experiences of professional students with disabilities in practice placements, there is also evidence of difficulties and barriers within the higher education establishments as well (Baron et al., 1996, Holloway, 2001, Kolanko, 2003, Fuller et al., 2004b, Carroll and Iles, 2006, Prowse, 2009, Collinson and Penketh, 2010, Ricketts et al., 2010, Rickinson, 2010, Brandt, 2011, Bevan, 2013, Evans, 2014b). The research cited above demonstrates continuing barriers to learning despite a UK report into dyslexia in higher education which made 101 recommendations to improve higher education policy, practice and provision in 1999 (National Working Party on Dyslexia in Higher Education, 1999). However, students in the UK are not alone in experiencing difficulties attributed to dyslexia. Kolanko (2003) interviewed seven pre-registration nursing students with learning disabilities in the US (the term used in the US for specific learning difficulties). The nursing students said that they had to work harder than their peers for less positive outcomes (Kolanko, 2003) which is further supported by research in Ireland by Evans (2014a). These were small-scale studies with twelve students in the study by Evans (2014a), however, the data produced was rich and detailed, in keeping with qualitative research (Creswell, 2013).

Students on professional courses will have had previous educational experiences which may have a detrimental effect on their emotional wellbeing and learning (Price and Gale, 2006, Collinson and Penketh, 2010, Gwernan-Jones and Burden, 2010, Griffiths, 2012).

The pervasive discourse of either feeling stupid or being called stupid is evident in dyslexic students in all professional groups (Dale and Taylor, 2001, Wright and Eathorne, 2003, Sanderson-Mann, 2006, Morris and Turnbull, 2007b, Murphy, 2009, Murphy, 2011, Griffiths, 2012, Kong, 2012, Evans, 2014a). Students with a disability are entitled to have reasonable adjustments that will enable them to reach their full potential (Riddell and Weedon, 2006, Equality Act, 2010, Ricketts et al., 2010). However, there is also evidence from student narratives that they do not want to be treated differently (Walker et al., 2013, Evans, 2014a) with adjustments potentially causing social embarrassment (Riddell and Weedon, 2009). Some students would not disclose that they had dyslexia or access services so that they were not treated differently (Miller et al., 2009, Kong, 2012); identifying that adjustments could be seen by themselves and others as gaining an advantage (Kolanko, 2003, Miller et al., 2009, Hargreaves and Walker, 2014). Some students wanted to prove that they could achieve on their own merit (Kong, 2012).

Whilst adjustments within the university setting were seen to be easier to accommodate and achieve (for example extra time in examinations and the use of assistive technology) than in practice (Hargreaves and Walker, 2014, Nolan et al., 2014), the time taken for assessment and provision of these adjustments could be lengthy and leave the student without support (Kong, 2012). Several studies identified the need for early co-operation

between the university and practice placement mentors to ensure that reasonable adjustment requirements are known about early and can be established to support the student (Tee and Cowen, 2012, Botham and Nicholson, 2014, Howlin et al., 2014, Nolan et al., 2014).

It could be argued that the use of inclusive approaches would minimise the need for many of the adjustments (Disabled Students Sector Leadership Group, 2017) although there is little research on inclusive teaching and learning in nursing (Levey, 2016b). Levey (2016a) conducted a survey involving 311 nurse educators in the US investigating their knowledge of UDL. This demonstrated that there was support for the use of inclusive practices, with support within organisation and use of multiple methods of instruction being the best indicators for the adoption of this approach. Interestingly the longer the nurse educator had been in post, the less inclined they were to adopt UDL (Levey, 2016a). Carey (2012) conducted a phenomenographic study to investigate the perception of the inclusive curriculum involving 15 nurse educators in a single university in the UK. He found a wide range of experiences and perceptions about the amount of change that would be required to current provision to become inclusive and what support there would be to enable this. There was also a concern about the tensions between an inclusive approach to nurse education and professional requirements (Carey, 2012).

Professional requirements

As identified in the introduction, nurses are required to meet professional standards to maintain patient safety and the trust of the public, as well as the integrity of the

profession (Nursing and Midwifery Council, 2015a). Research conducted with several professional groups including teachers, nurses, occupational therapists and radiographers has identified that there is still an on-going concern about the inclusion of disabled professionals and in particular those with dyslexia from both lecturers and practice providers (Sowers and Smith, 2004, Murphy, 2009, Rankin et al., 2009, Carey, 2012, Ashcroft and Lutfiyya, 2013, Evans, 2014b, McPheat, 2014, Nolan et al., 2014). In the research by Carey (2012), the 15 nurse lecturers identified a disparity between the notion of inclusivity required by the Equality Act and the regulatory requirements of the professional body (Nursing and Midwifery Council, 2010a). They felt that there was a risk of undermining clinical standards with the use of reasonable adjustments (Carey, 2012). The debate regarding lowering of standards was also observed in the research of Bevan (2013) in the field of occupational therapy, where one participant with a disability was told by a manager that “occupational therapists with disabilities coming into the profession are watering down the profession” (p589). While this was a single example from one participant in the UK, it is supported by research by Walker et al. (2013) and Nolan et al. (2014) where participants shared similar concerns about the risks posed to the nursing and allied health professions by disabled students. This attitude of teaching staff and the effects on students with dyslexia will now be explored further.

Attitudes of teaching staff

Attitudes of teaching staff have been found to be key in the support of students with dyslexia (Storr et al., 2011, Cameron and Nunkoosing, 2012, Ashcroft and Lutfiyya, 2013). A grounded theory study by Cameron and Nunkoosing (2012) with 13 lecturers in one university identified that if the lecturers had personal experience of dyslexia, either

through colleagues or relatives, or through increasing contact with students with dyslexia, then they were more likely to show an interest and understanding in the condition and be pro-active in tailoring appropriate support. This is supported by further grounded theory research by Ashcroft and Lutfiyya (2013) with 17 nurse lecturers who identified that the longer that the lecturer had been in service and the more knowledge they had about the disability, the more positive they were about students being able to meet the professional requirements and to make adjustments. The literature review of UK evidence in relation to supporting disabled student nurses by Storr et al. (2011) identified that a negative attitude to students with a disability and a lack of understanding of the condition was a barrier to student progression and that a lack of awareness and a lack of support resulted in adverse student experiences. There was also evidence in much of the literature that there is a need for education of both lecturers (Sowers and Smith, 2004, Kong, 2012, Evans, 2014b) and practice colleagues (Hargreaves and Walker, 2014, Howlin et al., 2014) to recognise the implications and support needs of students with dyslexia. A wider debate would also include how health care professionals view students with a disability, especially as many are situated within a medical model as part of their professional role and see disability as a deficit or impairment (Bevan, 2013). This may influence the views of the academic staff, especially in relation to safety as discussed previously. The review of the literature has demonstrated that dyslexia affects how students engage with lifelong learning, but there is little evidence of how this could be transferred to qualified nurses with dyslexia. A further research question has therefore been formulated to investigate these concepts: 'how has dyslexia affected qualified nurses' engagement with learning?'

Pre-registration Nursing

As identified at the beginning of this chapter, there is a dearth of literature regarding qualified nurses but an increasing amount about student nurses. While the focus of this study is qualified nurses, it is important to review all the available research that has been conducted about dyslexia in nursing. Fifteen studies addressed issues surrounding pre-registration nursing students with dyslexia. Three of these studies used quantitative methodologies comparing cohorts of students from one university (Wray et al., 2012a, Wray et al., 2012b, Wray et al., 2012c), two used mixed methodologies (White, 2007, Sanderson-Mann et al., 2012), whereas the others used solely qualitative methodologies (Wright, 2000, Morris and Turnbull, 2006, Morris and Turnbull, 2007a, White, 2007, Tee et al., 2010, Child and Langford, 2011, Ridley, 2011, Evans, 2014a, Evans, 2014b, Howlin et al., 2014). The three quantitative studies explored issues of attrition in pre-registration students with dyslexia. The study by Wray et al. (2012c) identified that disability was a contributing factor to higher attrition within a pre-registration nursing programme, and in a further study by the authors, early screening, along with a support programme reduced attrition when compared to a previous cohort who had not received this intervention (Wray et al., 2012b). A significant number of students within this study were identified as having a specific learning difficulty with 11 percent being formally diagnosed and a further 17.5 percent being screened as at risk, although not all took the opportunity to be diagnosed. Only seven percent had declared that they had a Specific Learning Difficulty (SpLD) on admission to the course. This confirms growing evidence that a significant number of students with dyslexia are not diagnosed until entering university (Nichols, 2012, Wray et al., 2012b). Late diagnosis of dyslexia is an

important issue as studies of this have found that this has a negative effect on self-image, self-esteem, and access to support mechanisms (Dale and Taylor, 2001, Burden, 2008). A programme where study skills were incorporated into an inclusive curriculum was more effective than if study skills were offered as an addition to the curriculum and was more cost effective (Wray et al., 2012a).

A study by Ikematsu et al. (2014) to identify the prevalence of SpLDs in student nurses in Japan, reported that only 25 percent of the students with a SpLD within the 341 nursing programmes contacted graduated on time, with a higher rate of attrition than peers without a SpLD. This research identified a lower percentage of students with a SpLD than UK statistics at only 1.02 percent overall, which included Attention Deficit Hyperactivity Disorder (ADHD), Autistic Spectrum Disorders (ASD), dyspraxia as well as dyslexia. Survey respondents were asked to identify the number of “extremely difficult students” (Ikematsu et al., 2014 p 677) and then a tool was used to identify which students were likely to have a SpLD, which is liable to have produced a lower percentage of students. However, it is also possible that there is a significant difference in culture and attitudes to SpLDs in Japan (Kayama, 2010) and therefore the transferability of the research is questionable (Toma, 2006).

Experiences of Clinical Practice

Nine of the studies explored pre-registration student nurses’ experiences in clinical practice (Morris and Turnbull, 2006, Price and Gale, 2006, Morris and Turnbull, 2007a, White, 2007, Tee et al., 2010, Child and Langford, 2011, Sanderson-Mann et al., 2012, Evans, 2014a, Howlin et al., 2014), with one addressing both theory and practice in the

interviews with seven students (Ridley, 2011). Sanderson-Mann et al. (2012), Price and Gale (2006) and Child and Langford (2011) chose to compare two groups of students' responses, either by questionnaire, semi-structured interview or focus group to identify whether student nurses with dyslexia had different experiences in practice to those without. The three studies found that students with and without dyslexia experienced similar problems and that good mentor support was critical, however areas that students with dyslexia felt were more problematic were reading and writing care plans and documentation (Sanderson-Mann et al., 2012), handover and taking longer to settle into the placement (Price and Gale, 2006, Child and Langford, 2011).

In the introduction to this thesis, patient safety and drug calculations were identified as potential issues in practice. The study by Sanderson-Mann et al. (2012) however identified that students with and without dyslexia both identified drug calculations as an area of practice that they found difficult (Sanderson-Mann et al., 2012). This is of interest as in the non-comparative studies, the nursing students with dyslexia were very aware of the importance of drug administration and their perceived difficulties and therefore took longer over this skill to ensure that they did not make mistakes (Morris and Turnbull, 2006, Morris and Turnbull, 2007a, White, 2007, Ridley, 2011). This increased awareness of safety issues about drug administration by students mirrors the concerns of the 12 nurse lecturers interviewed in the discourse analysis study by Evans (2014b). Evans (2014b) found that there was still a significant debate amongst nurse lecturers regarding the inclusion of individuals with disabilities in nursing and in particular, those with dyslexia. Safety concerns were seen to legitimise students not

progressing rather than identifying problems that could be resolved. Students who required extra support were viewed negatively and that the duty of care to the student was not greater than the duty of care to the patients.

While mentorship was identified as an important form of support in practice to all students, the literature identified that the specific difficulties and needs of dyslexic students are not well understood in practice. Indeed the study by Child and Langford (2011) identified that mentors lacked knowledge about dyslexia, despite an increasing awareness within the profession (Dale and Aiken, 2007), a statutory obligation to adhere to equality legislation (Equality Act, 2010) and a number of publications and resources being available for mentors (Royal College of Nursing Practice Education Forum, 2007, Cowen, 2010, ROSPA, 2010, Tee and Cowen, 2012, Wharrad et al., 2012). Research by Black et al. (2011) evaluated the use of a tool to teach students on a mentorship programme about SpLDs. The results from 61 mentorship students showed an increased knowledge and receptiveness to learning more about dyslexia. However, there was no follow-up to demonstrate that this was used with students in practice. Therefore, further research should be undertaken to identify if this increase in knowledge affects the practice of mentors and the support available for students. The use of inclusive approaches within clinical placements could improve the support for all students (Heelan, 2013). (Heelan et al., 2015) presented the results of a classroom based activity where 25 healthcare educators applied the principles of UDL to clinical placements, however, this has yet to be evaluated in practice, demonstrating these approaches are still in their infancy.

Disclosure

Disclosure of dyslexia in practice was also an issue that was raised in the majority of the research studies found. While the pre-registration student nurses generally disclosed their dyslexia in the classroom, some, but not all, chose to do so in practice (Morris and Turnbull, 2006, Sanderson-Mann, 2006, Morris and Turnbull, 2007a, Ridley, 2011, Evans, 2014a). There is very little literature regarding disclosure of dyslexia by qualified nurses in practice, moreover, it was raised as an issue in the only two pieces of research involving qualified nurses. The results of both studies mirrored that of the research in student nurses showing that not all qualified nurses disclosed their dyslexia (Illingworth, 2005, Morris and Turnbull, 2007b) and that the decision to disclose appears to be dependent on the culture of the area and perceived benefits to the nurse or student nurse (Morris and Turnbull, 2006, Morris and Turnbull, 2007a, Morris and Turnbull, 2007b, Ridley, 2011).

One reason that nurses may be reluctant to disclose their dyslexia is the stigma attached to the condition (Riddick, 2000, Morris and Turnbull, 2007a) with students feeling that they will be labelled as stupid (Roberts, 2009, Evans, 2014a) or even dangerous (Morris and Turnbull, 2007a, Sanderson-Mann et al., 2012). Without disclosure, nurses are unable to access the support that they are entitled to under the Equality Act (2010). However, one of the main reasons identified for disclosure in both student and qualified nurses was to maintain patient safety (Illingworth, 2005, Morris and Turnbull, 2007a). This was also evident in the research into the placement experiences of both student and qualified healthcare professionals, including nurses (Hargreaves et al., 2013, Walker

et al., 2013, Hargreaves and Walker, 2014), health care professionals and student teachers (Nolan et al., 2014). Students in the study by White (2006) wanted control of who and when to disclose, with the decision influenced by previous experience and attitudes of staff.

The issue of disclosure was further supported by literature from other professions (Foster, 2008, Nolan et al., 2014). Interestingly all the six participants in a narrative research project with teachers of further and higher education based in England and Finland by Burns and Bell (2010) had disclosed to the students that they taught and actually used their experiences as a teaching tool. However, in this study, only two had disclosed to their manager, and that was after they had proved themselves within their field and felt confident enough to do so (Burns and Bell, 2010). While this was a small-scale study of very personal accounts, this is also supported by research by Gerber and Price (2012) and Morris and Turnbull (2007a). The narrative approach has the advantage of allowing participants to tell their story in detail and connect with the reader, leading to increased empathy and potential change in practice (Riessman, 2008)

The timing of disclosure was also an issue in the literature both for students and practice areas. Nolan et al. (2014) used mixed methodologies to identify the issues and concerns for professional placements of disabled student teachers, social workers, speech and language therapists, dieticians, doctors, dentists, occupational therapists, nurses, and radiographers. While this wasn't specific to just dyslexia, 29.5 percent of the disabled students surveyed stated that they had a specific learning difficulty and were the largest

single group in the study (Nolan et al., 2014). The results reported that 70.6 percent of the disabled students who responded stated that they didn't disclose prior to the placement (Nolan et al., 2014). Within this study, practice educators were also surveyed, and they identified that planning for extra support was difficult in a busy environment and that disclosure before the placement would be beneficial. The five out of the six student teachers in the study by Griffiths (2012) felt that the school should be told prior to them starting their practice placements. This was to allow extra time that would be required for preparation and support but also, in the case of one student teacher, because they felt guilty that the class teacher had delegated responsibility of their class without knowing that they were dyslexic, which they might view as detrimental to their pupils (Griffiths, 2012). This discourse may well be in response to concerns raised that teachers need near perfect literacy skills to be a good role model for pupils, although there is no research to support this (Riddick and English, 2006).

The review of the literature has identified that disclosure is an important issue for nurses with dyslexia and so the concept of disclosure is explored further through the data gathered in this study, with participants being asked why they chose to disclose. This may help understand the barriers and enabling factors for disclosure in qualified nurses. While the literature tends to focus on the negative issues associated with dyslexia, there was also some identification of the benefits that it could bring, which will now be addressed.

Benefits of dyslexia

It is important to recognise the positive benefits that individuals with dyslexia can bring to health care and teaching professions. Individuals with dyslexia are often very insightful and intuitive (Davis, 2010), have good problem-solving skills (Reid, 2009), increased spatial awareness (Roberts, 2009), are caring and empathetic (Francis-Wright, 2007, Glazzard and Dale, 2013), have a good long term memory (Doyle, 2014), although they are likely to have difficulty with working memory (Bartlett et al., 2010) and be creative and lateral thinkers (Leather et al., 2011). In several of the studies students and practitioners identified positive benefits from having dyslexia (Price and Gale, 2006, Francis-Wright, 2007, Roberts, 2009, Child and Langford, 2011, Griffiths, 2012, Glazzard and Dale, 2013, Evans, 2014a). Student teachers with dyslexia used their experiences to shape themselves into the type of teacher that they would have wanted as a child and were able to identify children with difficulties more quickly (Burns and Bell, 2011, Glazzard and Dale, 2013). Student healthcare practitioners in the study by Hargreaves et al. (2013) also identified that they had greater empathy due to the difficulties that they had experienced due to disabilities, which enhanced patient care.

To get to university many of the students will have had to overcome many difficulties and developed compensatory strategies (Pollak, 2005). Several studies identified that dyslexic students needed to be more organised (Francis-Wright, 2007, Harriss and Ricketts, 2009, Jelfs and Richardson, 2010, Griffiths, 2012, Glazzard and Dale, 2013, Evans, 2014a) and have developed strategies such as using assistive technology (Murphy, 2011), notes and prompts (Burns et al., 2013), and over checking (White, 2007). However, many of these strategies take time and can be tiring (Murphy, 2011). A

research question has therefore been developed to investigate this issue which is 'what strategies are effective in supporting qualified nurses with dyslexia?'

Summary

This chapter has reviewed some of the contemporary theories of lifelong learning, demonstrating the application to nursing practice and how the adult learning is influenced by a wide range of factors including learning situations, the culture of the learning environment, individual factors and previous experiences. The use of narratives to enable adults to make sense of their experiences and as a learning tool is also proposed. This chapter also demonstrated an increasing interest within higher education about the concept of inclusive teaching and learning and that this has been influenced by the widening participation agenda, as well as recent changes to funding.

From the review, it can also be seen that while there is a general dearth of literature around the experiences of qualified nurses with dyslexia and their experiences of learning, there is an increasing body of research surrounding student nurses and other professions. However, it must be noted that the studies are generally small and much of the research either repeats previous methodologies or are using the same sample of respondents. While much of the research is small-scale qualitative studies, which on their own may not be transferable, together they provide a growing body of evidence. Qualified nurses may well recognise the experiences of the students in the literature and the research informed my understanding of their experiences. It can also be seen that the attitudes of the academic and practice based staff will also affect the experiences of

registered and student nurses with dyslexia and that negative experiences of education may deter some qualified nurses from re-engaging with formal education.

The review of the literature has shaped and informed my research questions by identifying the current state of knowledge on the topic. It has demonstrated that there is limited literature on the lifelong learning experiences of qualified nurses and very little literature research about the effects of dyslexia on lifelong learning. The consideration of inclusive teaching and learning in nurse education is also rather underexplored.

While the majority of research on the topic in nursing and allied professions is qualitative, this fits with an understanding of people's experiences and will be discussed further in the methodology chapter. There is also very little research into how best to support registered nurses with dyslexia to engage and succeed in lifelong learning, and this has confirmed the research questions to be;

- How has dyslexia affected qualified nurses' lives and development strategies over their careers?
- How has dyslexia affected qualified nurses' engagement in lifelong learning?
- What strategies are effective in supporting qualified nurses with dyslexia?

The methodology proposed to investigate these research questions, drawing on lifelong learning theory, will be discussed in the next chapter.

Chapter Three: Methodology

Introduction

This chapter will introduce a range of approaches that could have been used to address the research questions. The approaches will be critiqued, and a justification for the chosen paradigm and research methodology will be given in order for the research questions to be answered. It will be argued that to explore in depth the effects of dyslexia on the learning experience the constructivist paradigm is appropriate and that the use of the narrative approach is in keeping with the biographical theory of lifelong learning. The role of the researcher and participants within this type of research will also be discussed, along with how semi-structured interviews can be utilised to facilitate the nurses' narrative stories. The chapter will progress to demonstrate how template analysis, aided by the use of the hermeneutic cycle, is an appropriate method of data analysis, in keeping with the chosen epistemology. It will also show that the use of an asynchronous online discussion forum can strengthen the dependability and credibility of the results, as well as maintaining the voice of the participants, which is in keeping with the narrative approach.

Choice of Paradigm

Researchers either consciously or unconsciously take a philosophical standpoint which will influence how they approach any piece of research (Blaikie, 2004), including the formulation of research questions or hypotheses because of their ontology and epistemology. As my research is focused on how having dyslexia affects qualified nurses' experiences of lifelong learning, the study could have been approached in a number of ways. For example, a positivist paradigm would advocate the use of the scientific

method to identify common characteristics which would apply to all nurses with dyslexia (Parahoo, 2006). As with other studies identified in the literature review, a quantitative approach could have been used to survey students who were attending post-registration courses at universities. A comparative approach could then have been used drawing on the survey findings to explore similarities and differences between student experiences of learning beyond initial registration between those who identified that they were dyslexic and the non-dyslexic student population. The aim of this type of research would be to identify if there were any significant differences in the two populations and to show causality (Parahoo, 2006). The positivist approach was not chosen for this research because a representative sample would be very difficult to achieve, due to lack of identification and disclosure of dyslexia discussed in the literature review. This was discussed in the literature review in relation to the study by Morris and Turnbull (2007b) where there were 116 respondents to a national survey on the career progression of nurses with dyslexia. Moreover, fitting with the research questions developed at the start of the study, and refined following the literature review, the methodology for the proposed study had to challenge how dyslexia is experienced by qualified nurses in their everyday lives and contexts, which meant an approach that would give a deep understanding of the participants' experiences was required.

In contrast to the positivist approach, post-positivist researchers argue that humans cannot be studied in controlled or formulaic conditions as they live within social contexts that cannot be excluded from the interpretation of the data (Fox, 2008). Research within the critical paradigm is based on the assumption that society is influenced by power relationships and that individuals and groups are affected by these relationships (Tracy,

2013). Critical researchers aim to recognise these power relationships and to seek to emancipate people from injustice (Budd, 2008). The critical paradigm also argues that oppression is most effective when the oppressed do not consciously recognise their oppression, and therefore research within this paradigm seeks to raise awareness of power imbalances (Tracy, 2013). It could be argued that nurses with dyslexia have a disability and that research with this group should seek to redress any inequalities they may encounter. As my research will be used to inform practice, the primary aim was not political or emancipatory and therefore not aligned to the critical paradigm. The research questions aim to understand how dyslexia is experienced by qualified nurses and this concurs with the interpretive or constructivist paradigm (terms which are used interchangeably within the literature) (Lincoln et al., 2013). The constructivist paradigm is aligned with my own personal ontology that there are multiple realities that are individually constructed dependent on experiences, situations, and interaction with others (Mertens, 2010, Lincoln et al., 2013) and therefore, is the chosen paradigm for this study. Within this ontology, each nurse with dyslexia will have had different experiences and make sense of those experiences in different ways depending on the timing, social context, their personality and interaction with other people and other experiences (Parahoo, 2006).

Axiology

Within the chosen paradigm it is also important to identify the researcher's position in relation to the participants and the research being undertaken (Creswell, 2013).

Hellawell (2006) suggests that identifying the researcher's position on the insider-outsider continuum will make them more reflexive in their writing and their research. It

is important to note that I am also a nurse and while not having dyslexia myself, have several family members who do, as well as having supported a number of students with dyslexia. This is likely to give me a greater empathy and understanding but may also influence how the research is conducted, as well as the interpretation of the data (Wahyuni, 2012, Creswell, 2013). However, the influence of the researcher is an identified phenomenon within the constructivist paradigm, which should be made explicit to increase the level of credibility of the research (Toma, 2006). Constructivists do not claim objectivity within the epistemological assumptions of the paradigm; in fact, they seek to develop a relationship with the participants in order to elicit rich sources of data (Mertons and McLaughlin, 2005). Lincoln (1995) goes further by suggesting that detachment and objectivity actually reduce the quality of this type of study. It is important to be able to see the situation through the participants' eyes, and while this is never truly possible, an empathetic approach will help with 'Verstehen', which is the understanding of participants' perspectives (Tracy, 2013). The values of the researcher or their axiology will have an impact on the research process, in the way that it is conducted and the results that are obtained (O'Reilly and Kiyimba, 2015). I have a strong moral and ethical belief that research should benefit the participants, as well as a view that the voice of the participants should be maintained as much as possible throughout the study. Again, this is in keeping with my ontology that reality is subjective and that individual experiences will contribute to the understanding of a phenomenon. These values will have an impact on the choice of methodology to investigate the research questions.

Choice of Research Methodology

As the research questions that are central to this study are focused on the effects of dyslexia on nurses and their engagement in learning, there are a number of research methodologies that are appropriate within the constructivist paradigm to investigate them, including phenomenology, narrative, case study, grounded theory, and ethnography. Phenomenology would be appropriate as it would investigate common experiences of the participants (Creswell, 2013). Phenomenology, case study, and ethnography make assumptions about the shared experience and require a relatively homogenous group to draw conclusions from the data or to develop a theory as in grounded theory (Creswell, 2013). The group being investigated may share some characteristics, as they are all qualified nurses who have dyslexia and may have the shared culture of nursing. These methodologies focus on identifying composite experiences that could be common to individuals within the group (Creswell, 2013). In contrast, narrative research can be conducted with only one participant or a small number of participants and can investigate experiences or a whole life course (Squire et al., 2008, Creswell, 2013). Narrative stories may be about a specific context or an organisation (Creswell, 2013), drawing on aspects of phenomenology and ethnography (Sikes and Gale, 2006).

Narrative Approach

Narrative is the research methodology that was chosen to investigate the research questions of: how has dyslexia affected qualified nurses' lives and development strategies over their careers; how has dyslexia affected qualified nurses' engagement in learning; and what strategies are effective in supporting qualified nurses with dyslexia,

as the research aim is to investigate individual experiences in detail. The narrative approach aims to maintain the integrity of the individual experiences of the participants. This is in keeping with my ontology; that reality is an individual experience and epistemology; that knowledge can only be obtained from those who have had those experiences. The use of a narrative approach is advocated by the biographical approach to lifelong learning, with Alheit (2005) emphasising that there is no other way for people to describe their life history. A narrative approach has not been used in any of the previous research investigating qualified nurses and only one study into student nurses within the literature review (Evans, 2014a), which gives a novel approach to the subject and perhaps a new perspective on the topic (Creswell, 2013). Clandinin and Rosiek (2007) suggest that narrative research can be influenced by a number of epistemologies, although their favoured approach is that of Deweyan pragmatism (Putnam, 2010). Clandinin and Rosiek (2007) argue that narrative has a strong resonance with Dewey's theory of experience, suggesting that experience is always changing with thoughts being influenced by interactions with the social and personal environment. It has also been argued that Dewey, in fact, became more of a social constructivist, especially later in his career (Sutinen, 2008, Garrison, 2009).

A narrative methodology is congruent with the constructivist paradigm as it allows for the participants to share their experiences (Caduri, 2013). From a constructivist view, stories are an interpretation of what has happened to the participant, which can change over time and when and where they are told (Bruner, 2004). Sikes and Gale (2006) further suggest that human beings make sense of the world by constructing stories to rationalise what has happened and to explain this to others. Narrative stories are also

individual and may give some insight into how individuals see themselves (Creswell, 2013) or how they want to be seen by others. While it can be seen that truth is relative, it is still the truth as experienced by the participant and therefore important to study. From a constructivist perspective, this is their reality as they perceive it (Bruner, 2004) but it must also be recognised that the interaction between the researcher and participant will alter that narrative (Chase, 2013).

The narrative will also be influenced by memory (McAdams, 2008, Bold, 2012) and past, present and future experiences (Sikes and Gale, 2006, Clandinin and Murphy, 2007).

McAdams (2008) suggests that autobiographical memories are selective and constructed to enable people to make sense of their lives. In fact, the use of narrative interviews can enable the participant to reflect on their experiences and learn from them (Alheit, 2012) and the way that they are told will influence that learning (Field, 2012). These narratives are influenced by social as well as cultural relationships, both with the interviewer and within the cultural norm at the time of the interview (McAdams, 2008). This has led to criticism of this methodological approach as the narrative will evolve and change over time and in different situations (Chase, 2013). However, that is the nature of the human experience and can illuminate key issues within the participant's life and how they feel about them (McCormack, 2004). It also encourages people to understand what has happened to them and why they might act in a certain way (Caduri, 2013).

To investigate the research questions about the effects of dyslexia on registered nurses and their engagement with learning, a narrative lifecourse approach described by Bengtson et al. (2005) was used in this study to investigate the experiences of the

participants during their nursing careers, as well as how earlier educational experiences may have influenced their later educational choices.

The lifecourse approach recognises how time, social context, transitions, human development as well as the participants' own agency all affect the course of their lives (Bengtson et al., 2005). Lifecourse links well with the concept of lifelong learning as both are interested in the concepts of time and human development (Pollard, 2003). This again is aligned with the biographical theory of lifelong learning which suggests that people learn within the macro-perspective of society but also have their own paths and experiences within that society (Alheit, 2012).

Choice of Data Collection Methods

The narrative approach can utilise a number of research methods including interviews, observation, interpretation of visual and performance media and written accounts or diary entries (Creswell, 2013). Because of the nature of the research questions being investigated, some of these methods would be either unavailable or inappropriate; observation would be intrusive, especially if the participant had not disclosed their dyslexia in practice and participants might not have kept a diary, therefore the narratives were collected by the use of interviews. A semi-structured approach was chosen for these interviews. The use of semi-structured interviews with prepared questions allows for some guidance for the inexperienced researcher but also allows for divergence away from the interview schedule (Parahoo, 2006). In keeping with the narrative approach, these were in-depth interviews with participants being asked to give specific examples and to describe experiences (Chase, 2013). Narrative interviewing aims to generate detailed accounts which can address one incident to a whole life

course or career (Riessman, 2008). This biographical approach is seen as eliciting ‘big-stories’ which investigate the overall experience and are individually orientated, as opposed to ‘small-stories’ which prioritise events and may be more socially orientated (Squire et al., 2008).

The use of semi-structure interviews can also help to prepare the participants if they are given the schedule before the interview, something that was done in this case. This will allow them to gather their thoughts as well as prepare psychologically for what could be an emotional process of discussing their thoughts about their lives (Riessman, 2008). It will also allow them to reflect on their experiences and to enhance the process of biographical learning (Alheit, 2012), which while not the primary intention of the research may be a secondary outcome.

Semi-structured interviews can be conducted in a number of ways, although data collection methods must also be accessible and acceptable to both researcher and participant (Tracy, 2013). While face-to-face interviews or telephone interviews have been traditionally used to undertake semi-structured interviews, new and mobile technologies have provided other options for interviewing which can include: instant messaging, email, and the use of Skype (King and Horrocks, 2010), all of which have benefits and problems associated, which will be discussed later in this chapter. These alternative methods of interviewing were considered, as I was aware that there was a limited pool of potential participants locally and that interviewing remotely might be required.

Regardless of the method used, for an effective interview to take place, there must be successful communication between the interviewer and participant (Tracy, 2013). Communication is too complex to discuss in any detail within this research study and could be a thesis in itself. However, there are areas that are very pertinent when discussing how a narrative account could be obtained. The researcher needs to develop a rapport with the participant to enable trust and an open dialogue (Webb, 2011). It could be argued that a rapport could be developed with any interview method, however, in comparison to face-to-face interviews, Glogowska et al. (2011) suggest that telephone interviews make this more difficult due to the inability to see facial expressions and other body language. However, Trier-Bieniek (2012) suggest that there is no guarantee that more of a rapport can be developed with a face-to-face interview than telephone interviews and that more honest data may be elicited due to relative anonymity and as people are used to this method of communication. Moreover, several authors have suggested that telephone interviews may be particularly useful for researching sensitive issues (King and Horrocks, 2010, Trier-Bieniek, 2012, Mealer and Jones, 2014) and may reduce the power imbalance that can occur between researcher and participant (Mealer and Jones, 2014). King and Horrocks (2010) also suggest that telephone interviews elicit less rich data, but that this can be overcome with a clear briefing of the participants before the interview and more probing by the researcher. This would be particularly important with narrative interviews where the participant should be briefed to give as detailed an answer as possible and may move from one story to another (Riessman, 2008). Reduced processing speed and problems with working memory, which can be associated with dyslexia (Bacon and Handley, 2014),

resulting in slower responses, is something that must be considered when interviewing participants. It is important to allow time to respond, especially with telephone interviewing, where the interviewer is unable to see that the participant is thinking about the answer (Holt, 2010).

Skype allows the researcher to see the facial expressions of the participants, enabling a personal connection (Seitz, 2015) and reduces the risk of misinterpretation of the message being delivered (Sullivan, 2012). Visual cues in communication can help with developing rapport as they can demonstrate warmth and genuineness (McCabe and Timmins, 2013) as well as active listening (Moss, 2012). Active listening is particularly important within narrative interviews as the participant is likely to talk for longer as they are encouraged to tell their story (Riessman, 2008), and the researcher needs to show that they are still attending to the conversation to maintain the rapport (Webb, 2011). However, Seitz (2015) found that a lack of direct contact made it harder to elicit detailed answers from sensitive questions when comparing Skype and face-to-face interviews.

As online methods of communication are becoming more commonplace, it could be argued that the use of these online methods in the interview process will become more natural for both participant and researcher (Trier-Bieniek, 2012). This opens up further possible methods of data collection such as email and instant messaging. Indeed, email is widely available and easily accessible (King and Horrocks, 2010). Traditionally email and instant messaging are used to deliver short packets of information, therefore if richer data is required, as with the narrative approach, a longer length of interaction with the participant will be required (King and Horrocks, 2010). Narrative interviews are

likely to be long and require the interviewer to encourage the participant to tell their stories in detail rather than just answering the questions (King and Horrocks, 2010). However, this longer length of contact and interest in the participant may help develop the relationship with the researcher (McCabe and Timmins, 2013) and which in turn may help develop rapport and a more honest response (King and Horrocks, 2010). Email allows the participant to consider their response to a question which may be useful for nurses with dyslexia who have slower processing speeds (Callens et al., 2012), although the use of written communication may not be effective when researching a group of individuals with potential difficulties in expressing their thoughts in writing, spelling and reading (Reid, 2009). Moreover, it is reported that many people with dyslexia prefer verbal discussion (Reid, 2009) as a form of communication in comparison to writing and for this reason, verbal methods of interviewing were used in this study.

While remote interviewing is an important pragmatic option for researchers, there are still difficulties associated with both telephone and Skype interviews. Confirming authenticity of the participants could be a problem especially where the participants are not seen or are unknown to the researcher (King and Horrocks, 2010). It would also be possible for nurses without dyslexia to participate in the study, even if proof were requested, as it may not be easy to identify if it were the same person either online or on the telephone. However, as a detailed description of their experiences of dyslexia and diagnosis are requested as part of the interview, again it is unlikely not to be recognised. A more difficult type of authenticity to identify is that of the real self; are the participants remaining true to themselves and their real feelings and not just responding the way they think they should? King and Horrocks (2010) suggests that participants are

more likely to reveal personal information online with Sullivan (2012) confirming that with an increase in online presence people are no more likely to fabricate an alternative self than in face-to-face interactions. Longer interviews are also more likely to reveal the real feelings of the participants, especially as they are recalling their own lives (Atkinson, 2012).

Technical difficulties can be a problem; Skype can have delays and interviews can be interrupted by poor broadband speed and a pixilated picture (Seitz, 2015), therefore it may be beneficial to test the connection before the interview. Distraction should be minimised if possible to reduce interruptions in the interview (McCabe and Timmins, 2013), which may be particularly problematic for participants with dyslexia (Sugg, 2014). Participants and the researcher need to ensure that the interview takes place in an area that cannot be overheard by others as would happen in face-to-face interviews, to maintain confidentiality (Deakin and Wakefield, 2014). It could be argued that while the researcher can advise the participant about this they have little control over where the participant is during a telephone or Skype interview. Participants must be fully aware and consent to the recording of interviews (King and Horrocks, 2010), as they would not be able to see any recording devices. Further details of interview methods used are detailed in the section on participant information, presented in the next chapter.

After the interviews were conducted with the participants, the resultant data needed to be analysed. There are a number of ways that the interview could be transcribed and analysed (Riessman, 2008). The plan was to transcribe the interviews verbatim and then turn them into stories as advised by (Ellis and Bochner, 2000) and (Tetley et al., 2009).

The interviews are likely to be long and the participants retell their lives in a disordered fashion. The process of storying the transcript will bring back some order to the narrative and make the life history clearer (McCormack, 2004). While this involves a degree of interpretation on the part of the researcher, research has shown that returning of verbatim transcripts is equally as problematic as participants tend to focus on correcting grammar and punctuation (Hagens et al., 2009). It has been argued that asking participants to review transcripts is too problematic and should not be done at all (Hagens et al., 2009, Mero-Jaffe, 2011). However, a participatory approach is being taken in this research, and the views of the participants are of the utmost importance (Tetley and Hanson, 2000). The method of storying the narrative interviews was adapted from McCormack (2000a) and McCormack (2004).

The first step of McCormack (2000a) is for the transcript to be viewed with 'multiple lenses' which can be facilitated by the use of the hermeneutic cycle. The principle of hermeneutics suggests that truth emerges when ideas are viewed from different perspectives rather than a linear process (Worsley, 2012). McCormack (2000a) also suggests identifying my own position as a researcher within the narrative, including how I respond both physically and emotionally. Along with the interviews, I aimed to keep a research diary to increase my reflexivity and aid the identification of my role within the narrative. Browne (2013) suggests that the research diary should include information on how the research is developing and could be used to help make sense of the emergent data. The diary would also help me to identify how I am developing as a researcher (Borg, 2001).

Within narrative interviews there is a change in the power relationship as the participant should be allowed to give long and detailed responses to questions and to diverge from the schedule chosen by the interviewer if that helps with the generation of the story (Chase, 2013). The interviewer should allow the interview to progress in such a way as to encourage the participant to tell the story that they want to tell (Wiklund-Gustin, 2010). It is also important to recognise the role the interviewer will have within the narrative, which will become co-constructed (Riessman, 2008). In keeping with the constructivist/interpretivist approach, the narratives will be influenced by the interviewer, either through the questioning or non-verbal interactions and will require the researcher to reflect on how their pre-understanding of the participants might influence the interview process (Wiklund-Gustin, 2010).

Data Analysis

The data produced by the interviews could be interpreted in a variety of ways, including discourse analysis, structural analysis, interpretive phenomenological analysis and thematic analysis (Roulston, 2014). However, the choice of method must be congruent with the research methods and the philosophical approach chosen. My research questions involved identifying the detail of experiences of dyslexia and how they have affected engagement in learning and therefore for me, the content, rather than the structure of the interview, was more important. The choice of making the interviews into stories rather than using the original interview transcripts prevented discourse analysis of the words used in the narrative or structural analysis of the way that the story was told. My ontological and epistemological perspectives, as well as my education rather than linguistic or psychology background also influenced my choice of data

analysis, as any approach needs to be in keeping with the interpretive paradigm and the possibility of many realities (Willis, 2007). Thematic analysis was therefore identified as an appropriate approach to address the research questions.

While there are a number of approaches to thematic analysis, template analysis was chosen to give structure to the findings but also allow a degree of flexibility which is important with complex narratives, as well as the number of participants involved (King, 2012). Within template analysis an initial coding template is developed from the first interview, which guides the development of the coding, although this is not fixed and develops throughout the process until as much of a complete understanding as possible is developed (King and Horrocks, 2010). Template analysis can be used across a number of epistemologies including an interpretivist/constructivist approach (Brooks et al., 2015) and therefore it is a suitable approach for this study. Template analysis was aided by the use of NVivo which helped to manage and support the effective analysis of the data (Bazeley and Jackson, 2013).

Use of the Hermeneutic cycle

To aid the analysis, a hermeneutic cycle was used that had been adapted from Alvesson and Skoldberg (2009) and shown in Figure 1. This analysis necessarily started within the storying of the narratives as this is an interpretive process (McCormack, 2004). This framework was also chosen to give structure and transparency to the analysis, aiding in the rigour of the research (Toma, 2006). From the original hermeneutic cycle, the narrative was analysed as a whole and in parts and back again, with the parts influencing the whole and the whole influencing the parts. Literature supported my pre-

understanding of the nature of how dyslexia can affect the lifelong learning of registered nurses, but there was also a new understanding from the stories of the participants.

Template analysis allows for the use of 'a priori themes', which are themes which are identified before coding, although tentatively within the interpretive paradigm (Brooks et al., 2015). As a lifecourse approach was taken, the use of lifecourse theory to develop the initial template could be appropriate and therefore included within the hermeneutic cycles, with data reviewed and coded in relation to the five principles of the lifecourse perspective. The first principle is that of "linked lives" which acknowledges the fact that peoples' lives are influenced by their relationships with other people (Bengtson et al., 2005 p494). The second principle is that of time and place, recognising the importance of the historical and social context in which the story is situated. The third principle relates the importance of life transitions to the time and social context in which they occur (Bengtson et al., 2005). The fourth principle of agency and planfulness acknowledges that individuals make choices that affect the outcomes of their lifecourse, with the fifth principle of ageing and human development recognising that development is a lifelong process and that choices in earlier life have consequences later (Bengtson et al., 2005). How this was actually used within the study will be described in further detail in Chapter Four.

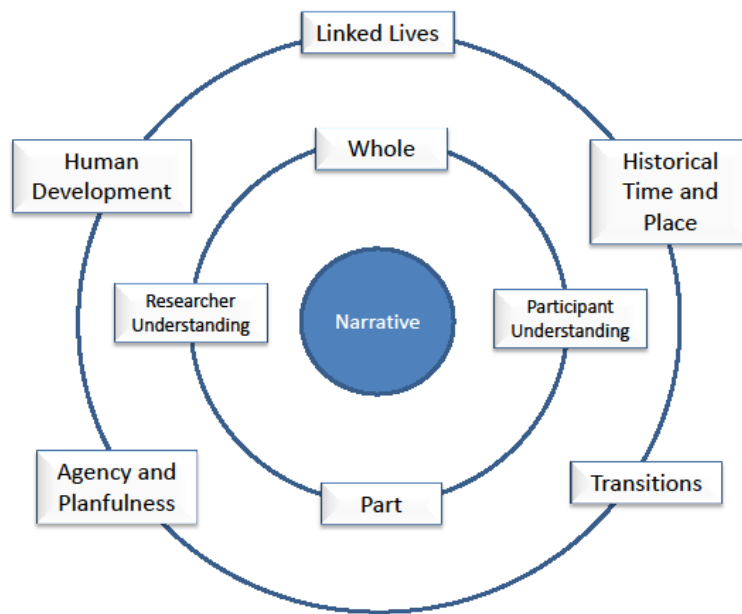


Figure 1: Hermeneutic cycle (Adapted from Avesson and Skoldberg (2009, p134) with Bengtson et al. (2005))

Validation of the themes

In keeping with my ontology and epistemology, the experiences and voice of the participants are of utmost importance and should not be lost in the data analysis and is in keeping with the narrative approach (Atkinson, 2012). To maintain this voice, I felt that I needed to ensure that the participants agreed with the themes that I had identified, while appreciating that everyone's experiences would be individual to them. To achieve this, an asynchronous online discussion forum was set up. The advantage of this method is that it will allow busy professionals to contribute to the discussion as getting them together in a group at the same time could be problematic (Watson et al., 2006). As dyslexia is a potentially sensitive issue, confidentiality may be an issue, therefore the use of pseudonyms and novel email addresses were established for use

within the online discussion forum. It has also been argued that participants are more likely to be open and honest about sensitive issues in focus groups, especially online groups (Kenny, 2005). Stancanelli (2010) identified that online focus groups have many of the characteristics of face-to-face focus groups, including group dynamics and the requirement for a facilitator. The focus group was facilitated using a Moodle based web-based learning system. The participants were enrolled into a closed group to maintain confidentiality, and they would be able to add to or moderate their own responses. This gave them plenty of time to consider the themes that have been developed and allowed for the production of rich responses (Watson et al., 2006). This method of encouraging the participants to participate in the development of the themes is in keeping with the narrative approach, with an attempt being made to maintain the voice of the participants throughout. This also reflects the notion that the participants' interpretations are as important as the researchers (Hollingsworth and Dybdahl, 2007).

Summary

This chapter has summarised the research methodologies that could have been used in this study. However, in terms of an approach that was fitting with my research questions, the rationale for the use of the constructivist/interpretivist paradigm and the narrative approach has been given. This paradigm and approach was linked to my own ontology as a researcher and included a discussion on how the researcher and participants can influence the results produced in this type of research. The use of the narrative lifecourse approach to investigate the research questions was discussed and aligned with the biographical theory of lifelong learning. A critique of the interview methods was given, along with justification of the choice of template analysis to develop

the themes from the stories. The use of an asynchronous online discussion forum to maintain the voice of the participants was also introduced. The next chapter will present how the research was conducted, describing the recruitment of the participants, the research process and how the ethical issues were mitigated and managed.

Chapter Four: Research in Action

Introduction

Moving on from the choice of research methodology and associated methods, this chapter will discuss how the data collection methods developed over the course of the study due to changing circumstances, as well as how the participants were recruited. At the beginning of this chapter, the context of the research will be outlined along with the ethical approval obtained. An initial study was conducted with two participants; this will be described including how the result of that study influenced the development of the main study. The chapter will then progress to the main study, presenting the profile of the participants, as well as how the research questions were answered. The use of technology will be discussed to recruit participants as well as to facilitate the semi-structured interviews. The process of coding the data through template analysis will be described along with the advantages and disadvantages of using qualitative data analysis software. The use of an asynchronous online discussion forum to validate the themes and to maintain the voice of the participants will be explained and the benefits discussed. Finally, this chapter will examine the ethical considerations of the study and how these were addressed in practice.

Context of the Research and Ethics

I live and work on a small Island in Great Britain, with a population of approximately 62,000, where the majority of registered nurses are recruited from areas including the UK, Europe, and Australasia. When planning the initial study and the subsequent main study I had to consider that living in a small island community brings restrictions both geographically and with access to participants. Also, being in a small community, many

of the potential participants would know me professionally and possibly personally. For research into potentially sensitive issues, such as undisclosed dyslexia, this could have both a positive and negative effect on participant recruitment. Participants may feel more comfortable discussing these issues with someone whom they know, however, this could also be a barrier, as they fear the loss of confidentiality and anonymity. Ethical considerations were therefore particularly important and kept at the forefront of my consciousness, and ethical approval was obtained throughout the research process as shown in Appendix One. Figure 2 demonstrates how ethical approval was required as the research progressed from the initial study and through the main study as it developed and evolved. Further reflections on how these ethical issues were managed are presented later in this chapter.

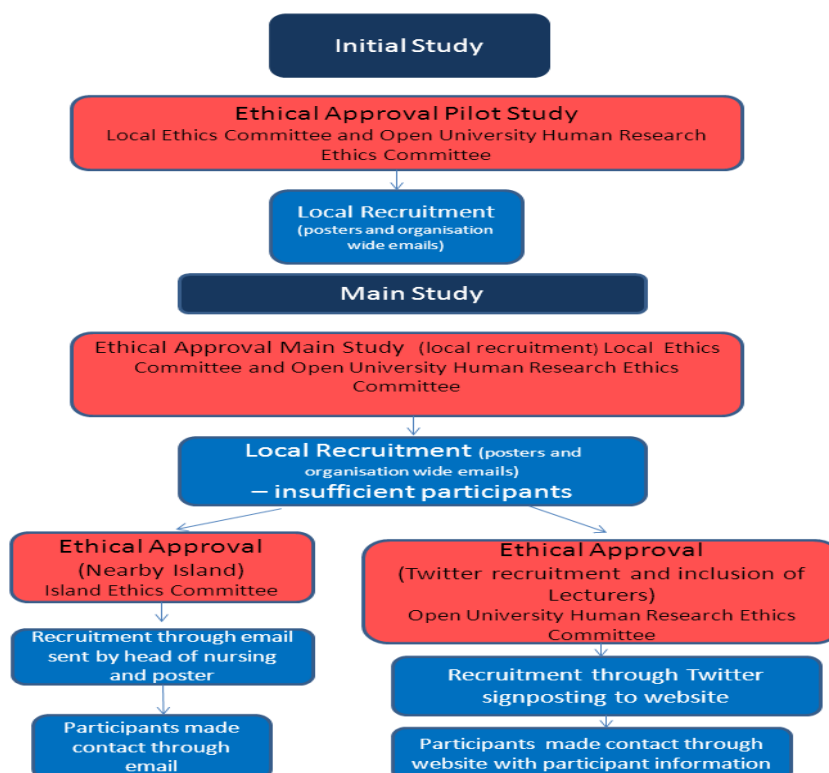


Figure 2: Overview of Ethical Approval

Initial Study

An initial study was conducted during the first year of this study using the approaches and methods discussed in the methodology chapter. At the start of the initial study, I had several aims. The first was a feasibility exercise to identify how many registered nurses would volunteer to participate in the research. The registered nurses would need to have been formally assessed as having dyslexia and registered with the Nursing and Midwifery Council. Living on a small Island, I was conscious that there was a limited pool of possible participants and that for the main study it might be necessary to seek ethical approval to recruit research participants who worked as qualified nurses in other health services within the UK. This might have some benefits of attracting participants from a more diverse range of backgrounds and make the research more transferable to other contexts (Elo et al., 2014). However, following initial advertisements locally, thirteen registered nurses expressed an interest in participating in the research, from a variety of nursing contexts and a range of ages. For the initial study, two participants were selected, given written and verbal information on the study and consented to take part. Details of the participants are presented in Table 1.

Nurses Participating in the Initial Study					
Pseudonym	Age group	Age when diagnosed with dyslexia	Area of practice	Number of years qualified	Highest academic level of qualification
Morgan	50-54	39	Older adults	31	Degree
Jodi	55-59	49	Specialist adult nurse	35	Diploma

Table 1: Initial Study Participant Details

The second aim of the initial study was to ‘test out’ the research methods and interview questions with two participants. One aim was to use a narrative approach, which was

congruent with the research questions. The narrative approach was facilitated by the use of semi-structured interviews with open questions that enabled the participants to give full and detailed answers, reflecting on previous experiences. The participants were very open about their lives and appeared to value being able to tell their stories. The interviews were both nearly two hours long, with further time required to discuss and debrief following the questions. From this, I learned that it might be more beneficial to conduct more than one interview with each of the participants to reduce fatigue and also to allow for clarification and expansion of the key points following the first interview.

The initial interview questions addressed issues in the context of dyslexia such as “can you tell me about your experience of nurse training; who have you told about your dyslexia throughout your career and what influenced that decision; what support were you offered during your training both in theory and practice, and what forms of learning have you engaged in since qualifying and why did you choose them?” While I also asked participants directly about their experiences of informal learning, their responses tended to focus on accredited courses or education conducted in a formal setting, and they found it difficult to articulate other forms of learning. This was followed up by a specific question in the online discussion forum, although again this did not elicit much more information. I was also very aware that the interview questions might lead the participants and influence the results, so I tried as much as possible to allow the participants to tell their stories without interruption.

I also used the initial study to test out data analysis and in particular the use of template analysis. The use of template analysis was a new technique to me, and while the initial study allowed for the practice of the method, this was limited as this method is designed for larger cohorts (King, 2012). Initially, the plan was to use the five principles of lifecourse theory as part of the hermeneutic cycle and as 'a priori themes'. However, this proved somewhat limiting and instead the themes were derived from the stories, and lifecourse theory was used to frame the synthesis of the findings. I was very aware that lifecourse theory was very congruent with the stories that had been elicited from the interviews; however, using this theory as a way of structuring the synthesis did not work well as the initial research questions were becoming lost within the process. Following the literature review, inclusive teaching and learning could also have been used to frame the analysis. However, this would not have been congruent with the lifecourse approach and did not fit well with the actual narratives of the participants, as inclusive teaching and learning had generally not been their experience.

As noted in the methodology chapter, when using a narrative approach, it is important to maintain the voice of the participants (Atkinson, 2012). While the use of an asynchronous online discussion forum seemed like an appropriate way forward to maintain that voice and would fit with the real world pressures of the participants (Watson et al., 2006), in reality, both participants found it difficult to access, and were not entirely clear what was required of them. They validated the themes, which are shown in Figure 3, but there was very little discussion. However, as there were only two of them, this would have reduced the level of discussion expected. What they did value was the opportunity to be in contact with other nurses with dyslexia and to recognise

that their experiences were shared with others. For me, this was enough of a positive aspect to keep this approach within the methods.

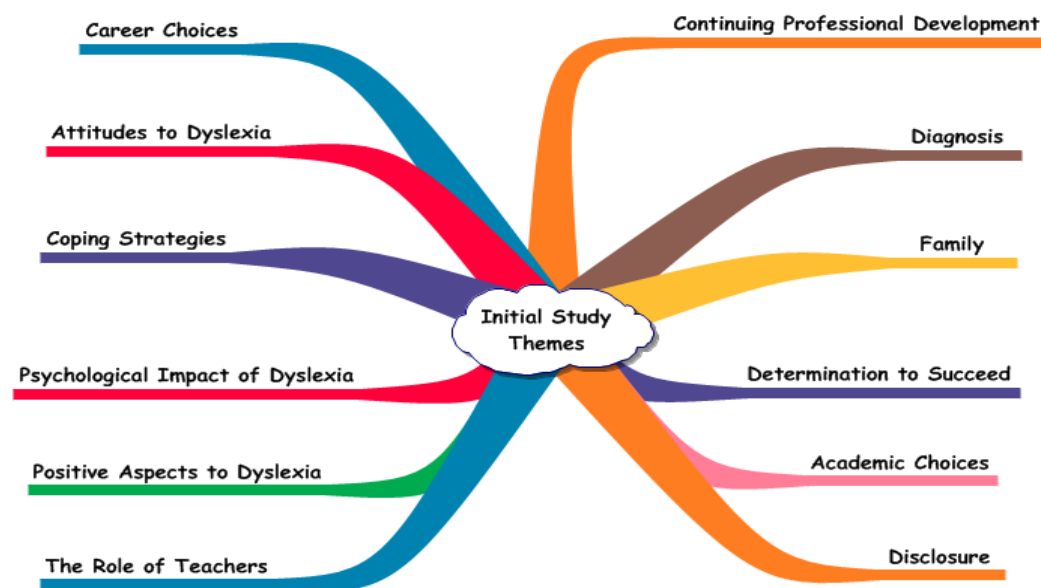


Figure 3: Initial Study Themes

The initial study, on the whole, validated the methodology and methods chosen to answer the research question and therefore little was changed for the main study. Minor amendments were made to the interview questions to ensure that participants understood what informal learning was. Further information on how to access the asynchronous online discussion forum was produced, both in the initial email to the participants and on the site to help the participants engage with the media. The initial proposal to use lifecourse theory to structure the synthesis of findings was found to be too restrictive, as not all the data fitted with the theory and instead it was included as one of the theories used for analysis.

Approach for Main Study

Following the initial study, ethical approval was gained to conduct the main study as demonstrated in Appendix One. The overall protocol for the main study remained the same as that of the initial study and is presented in Figure 4.

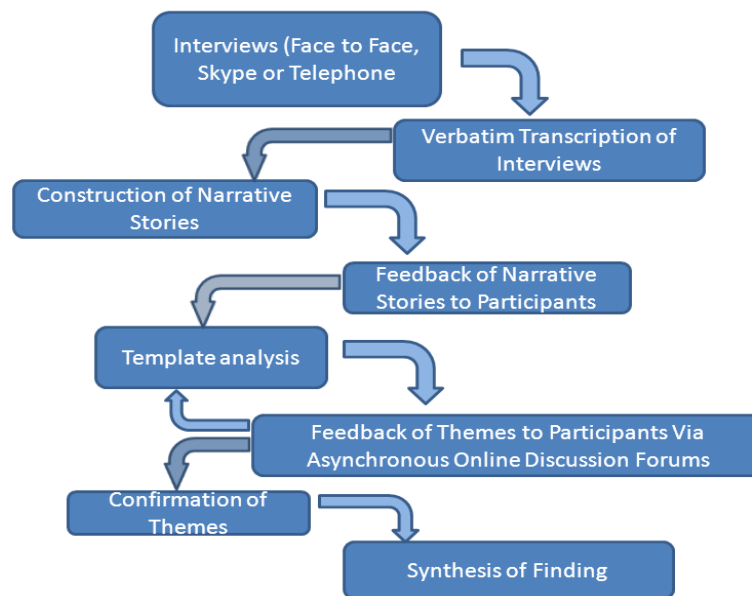


Figure 4: Overview of Research Protocol for Main Study

Recruitment of Research Participants for the Main Study

Following on from the initial study the participants for the main study were initially recruited using posters within the hospitals and nursing homes on the Island. Purposeful sampling was used as the participants needed to fit the criteria of being a registered nurse and being diagnosed with dyslexia. This potentially excluded a population of registered nurses who may have dyslexia but may not be aware or may not have sought further identification of the difficulties they may be encountering.

While statistically the number of nurses locally with dyslexia should have elicited enough participants to make the study viable, in practice, two nurses who had initially

responded to my call for participants withdrew due to difficult personal circumstances, which they felt would make talking about their past experiences too stressful. One potential participant had not been formally diagnosed and felt that it would be too difficult to go through that process. This demonstrates the potentially emotional challenges associated with narrative research (Pasupathi et al., 2009). Despite re-advertising the research locally, no new potential participants emerged and therefore recruitment off the Island was considered.

Initially, I felt that recruitment from a neighbouring Island would be preferable as the two Islands had similar nursing contexts, and I had contacts there to help with disseminating information. Additional ethical approval was required from the ethics committee on that second Island, which was granted with the proviso that changes needed to be made to the participant information to include Skype and telephone interviews, as well as how information would be sent and consent documented.

As one of the research questions was to investigate what strategies are effective in supporting qualified nurses with dyslexia, the perspective of lecturers who have provided that support was important. To inform the study, interviews with lecturers who had supported qualified nurses with dyslexia were included in the study. While there is an increasing body of evidence regarding the experiences of student nurses with dyslexia (Child and Langford, 2011, Ridley, 2011, Evans, 2014a, McPheat, 2014) and some research about nurse lecturers' support of those students (Morris and Turnbull, 2006, Child and Langford, 2011, Ridley, 2011, Evans, 2014b), there appears to be no literature on the experiences of nurse lecturers supporting post-registration nurses with

dyslexia. While the experiences of lecturers in these contexts may well be very similar, this is an area that seems to be underexplored. The addition of the views of lecturers allowed for the comparison with the responses of the registered nurses, identifying any discrepancies within the perceptions of the lecturers and the reality of the experiences of the registered nurses. This also increased the rigour of the research (Toma, 2006), something that will be reflected on in Chapter Seven.

At the same time that I was seeking ethical approval for recruitment on the neighbouring island, I participated in a Twitter Chat using the microblogging site Twitter on dyslexia in nursing. During the Twitter Chat, the topic of my research was raised, and one of the participants contacted me afterwards to suggest that members of the forum might like to be involved in the study. This raised the possibility of a new source of recruitment but also raised further ethical and practical issues.

Social media is being used more for professional development (Donelan, 2015, Nursing and Midwifery Council, 2015b) and research (Chae, 2015). For an isolated community, social media has the potential to allow practitioners to keep up to date with new innovations and contemporary practice (Ferguson et al., 2014, Moorley and Chinn, 2014). Donelan (2015) and Wilson et al. (2014) suggest that a profile on social media is increasingly required to develop and maintain professional networks and for career development. The Nursing and Midwifery Council are becoming more aware of the benefits and potential difficulties of social media, including guidance in the nursing code (Nursing and Midwifery Council, 2015a) and a separate guidance document on the use of social media (Nursing and Midwifery Council, 2015b).

Before the start of this research, I had two Twitter accounts, one which I used personally, and one professionally. My professional account had three followers, two lecturers, and a nurse. I had not used this account for about two years. While I was aware of Twitter, I was not a regular user and used it mostly passively as a source of information. As I have discovered, the recruitment of participants through Twitter, while inexpensive in terms of financial costs for resources such as posters, is time intensive (Sibona and Walczak, 2012, Quach et al., 2013, Child et al., 2014, Khatri et al., 2015). To maintain a network of followers to facilitate recruitment requires engagement with Twitter and reciprocity (Wilson et al., 2014). Followers will unfollow if the subject matter being tweeted is not engaging or is just a request for research recruitment (O'Connor et al., 2014). Further research identified that retweets are also more likely to occur if the tweet is accompanied by a picture (Patel, 2015), therefore posters were developed to advertise the research. The use of colour was a difficult choice as some people with dyslexia find certain coloured backgrounds easier than others but these colours will vary from person to person and a white background can also be problematic for some (Nichols et al., 2009) and would be less eye-catching.

Overall, this recruitment strategy led to the recruitment of nurses and lecturers from across Great Britain rather than just from a small Island community as planned. The use of social media, as well as remote interviewing techniques discussed in the methodology chapter, allowed for this change in strategy and the profile of the participants recruited will be presented in the next section.

Participant Profile

For the main study, fifteen registered nurses were interviewed, although one subsequently withdrew from the study leaving fourteen. Of these nurses, three were male and eleven female who had been qualified between two and thirty-three years. While the majority of participants were female, this is in keeping with the fact that approximately 90 percent of nurses are female (Royal College of Nursing, 2014). The highest academic qualifications achieved ranged from Diploma to working towards a Ph.D., with nurses coming from a variety of backgrounds ranging from education, specialist practice, acute to long-term care. Two participants had adult and paediatric qualifications, one learning disability, one learning disability and adult, two mental health and eight adult only. Nine of the nurses were recruited from local small island communities through poster and email advertising, with a further five from the UK through Twitter. Seven were interviewed face-to-face, three using Skype and four by telephone.

The participants had all been diagnosed with dyslexia between the ages of approximately seven to forty-nine. Two were diagnosed at primary school, four at secondary school and the other eight at university. The age at which the nurses were diagnosed did not appear to be related to their chronological age, with one of the older participants diagnosed at thirteen and three of the nurses in the youngest category being diagnosed in their twenties. Androgynous pseudonyms have been given to the participants to avoid being overly disclosive. The details of the nurse participants can be seen in Table 2.

Table 2: Information about Nurse Participants

Nurses Participating in the Research					
Pseudonym	Age group	Age when diagnosed with dyslexia	Area of practice	Number of years qualified	Highest academic level of qualification
Sam	30-34	8	Learning Disability Specialist	9	Masters
Vic	25-29	16	Adult Accident and Emergency	7	Ordinary degree
Jamie	25-29	20	Adult community	5	Honours degree
Jo	30-34	16	Nursing home	5	Diploma
Charlie	25-29	23	Adult acute mental health	2	Diploma (working towards degree)
Reece	25-29	13	Theatres	4	Diploma plus a degree module
Ashley	25-29	22	Adult Intensive Care	2	Diploma
Lesley	50-54	49	Paediatric education	29	PhD candidate
Dom	50-54	13	Specialist Adult	26	PhD candidate
Kelly	30-34	approximately 7	Adult Intensive Care	10	Advanced Diploma
Danni	35-39	18	Specialist Mental Health	13	Honours Degree
Andy	50-54	38	School Nurse	33	Diploma
Pat	30-34	18	Adult and Paediatric acute specialist	12	Honours Degree
Adi	35-39	20	Adult renal	14	Honours Degree

In addition, nine lecturers were interviewed from nine different universities from a broad geographical range across the UK. Two lecturers were from Scottish universities, three from universities in the South East of England, two from universities in the North West of England, one from a West Midlands university and one from a university in the East of England. The range of university lecturing experience was from six months to nineteen years, with three lecturers having specific roles relating to disability and inclusion. Three lecturers were involved in teaching the specialist community public health programme for school nurses and/or health visitors and all lecturers had students with practice assessment as part of at least one of their courses.

All lecturers were recruited through posts on the social networking microblogging site Twitter. Participants needed to meet the inclusion criteria of having experience supporting post-registration nursing students with dyslexia but were self-selecting. Ethical approval for recruitment of both nurses and lecturers through social media was sought. Those who responded to the recruitment advertisement were likely to have an interest in the subject (Sterba and Foster, 2008) and have access to Twitter or know someone who did. However, as can be seen from the participant information in Table 3, there was a range of lecturing experience, geographical location, expertise in dyslexia support and teaching roles. This was a benefit of the recruitment method (Sibona and Walczak, 2012).

Table 3: Information about Lecturer Participants

Lecturer information					
Lecturer	Region in the UK	Lecturing experience	Specific role in disability/inclusion	Speciality/ teaching role	Interview method
Billie	Scotland	7 years	Yes	Medical nursing/ Pre-registration	Skype
Mary	South East England	9 years	No	Critical Care	Skype
Judy	North West of England	2.5 years	No	Return to Practice/ Pre-registration mental health	Telephone
Gerry	East of England	9 months	No	School Nursing /Health Visiting	Skype
Fiona	North West of England	13 years	No	Advanced Practitioner	Telephone
Shirley	Scotland	6 months	No	School Nursing /Health Visiting	Telephone
Chris	South East England	19 years	Yes	Critical Care/ Pre-registration	Telephone
Lee	South East England	13 years	No	Health Visiting	Skype
Alex	West Midlands	7 years	Yes	Mentorship/ Learning Disability Nursing	Telephone

Data Collection and Analysis in Practice

In the current changing landscape of both nurse education and the increasing importance of inclusive teaching and learning in higher education, it is important to identify when the research was undertaken. The interviews were conducted between October 2014 and November 2015 and ranged from two to three hours long for the nurses and forty to ninety minutes for interviews with the lecturers. In keeping with the narrative approach, participants were encouraged to tell their stories as much as possible without interruption (Casey et al., 2016). The questions devised for the semi-structured interviews were used to guide the participants to talk about the area of their lives that were pertinent to the research questions, with a very general question at the beginning to help them feel more relaxed. The interviews were concluded when the participants felt that they had nothing further to say or no new information was being offered.

After the initial study, it was felt that it might be beneficial to conduct the interview in more than one session due to the time required, however in all but one case the interview was conducted in one period of time as once the participants started their story they wanted to finish it. In one case, I had to go back to a participant, as a section of their life story was missing when I went to transcribe it.

Although the literature described technical difficulties that could be experienced with Skype (Hanna, 2012), only one interview had to be converted to telephone due to poor connectivity. Telephone interviews for me were a little more difficult due to a lack of

visual cues, although as I became more experienced, this became easier. The lack of proximity to the participants during the interviews when they became emotionally distressed was also difficult, as it is in my personal and professional nature to want to comfort them and use therapeutic touch, which again is a problem that has been identified with remote interviewing (Norris, 2015).

As discussed in chapter three, the interviews were transcribed verbatim and then converted into a 'narrative story'. In practice, this involved putting the transcript into chronological order to facilitate the participants to identify with their how they had expressed their life history. The actual words of the participants were only changed if the sentences made no sense, although grammatical errors were not corrected. The questions asked were also removed during the production of the story although these can be found in the participant information in Appendix Two. This is in keeping with the chosen method (McCormack, 2000b) and the aim of maintaining the voice of the participants (Atkinson, 2012). It was these stories rather than the verbatim transcripts that were returned to the participants for checking. The stories were converted into MP3 format with the use of text to speech software and both the text and audio versions were sent to the participants to increase accessibility of the information.

All participants agreed to their narrative story except one nurse who felt that reviewing their narrative was too difficult for them. To prevent any further distress, they withdrew from the study and the narrative story was destroyed as this was the participant's narrative and morally and ethically I felt this was the correct course of action. This was in

keeping with similar situations experienced by other researchers when asking some participants to review their stories (Tetley et al., 2009). One participant particularly asked for information relating to ethnicity to be removed as they felt it was overly disclosive and this was done before analysis.

Data Collection for me was a privilege. The participants were very open about their experiences, some of which were very difficult. As an educator, I found it distressing to hear some of the narratives and not be in a position to offer assistance, which an extract from my research journal demonstrates:

“....was so articulate on the phone and their critical thinking was at such a high level but the fact that they cannot get a degree made me feel so sad and frustrated that I couldn’t help. All they needed was some additional help to get it on paper but they have given up” Research Diary Entry 13th October 2015

During the initial study, I had used the qualitative data analysis software NVivo to facilitate coding; however, in the main study, with a larger volume of data, I found it very difficult to develop the initial template and therefore reverted to manual analysis with flip chart paper and post-it notes. This involved reading through the stories and highlighting text as the codes were developed. These sections of the stories were rewritten on post-it notes, with different colours given to each participant. Highlighting the text in this way ensured that all the relevant data from the stories were coded. The post-it notes were then grouped into the themes on flip chart paper as shown in Appendix Three.

During the initial study the five principles of lifecourse theory (Elder, 1998) were planned to be used as a priori themes as part of the hermeneutic cycle as presented in Figure 1, although this was subsequently abandoned as it was too restrictive. During the main study, the inner cycle was conducted, with the narrative stories read as a whole to give a broad understanding and then the sections written on the post-it notes were read to ensure that the themes were consistent. Once the template had been established the whole narratives were read again to ensure that the themes were still consistent with the spirit of the stories. The participants' understanding as discussed in the hermeneutic cycle was achieved by using the asynchronous online discussion forum to validate the themes.

There were definite advantages to being able to visualise the participants' narrative on post-it notes and being able to move them into the themes, however the disadvantage was not having anywhere secure to keep them, having to have a room available to work on them and to pack them away in between sessions with the risk of loss of data.

Photographs of the flipchart sheets with the post-it notes on it were used during the write-up, which mitigated this problem (see Appendix Three). Once the template was established I then felt able to revert to NVivo which helped me to manage the large amount of data the interviews had produced, one of the main benefits of this software (Jones, 2007). An excerpt of NVivo coding for one participant is included in Appendix Three.

Having had some more experience with using NVivo, I attempted to use it initially again with the lecturer's stories. However, I found that I was over-coding, a problem that has

been reported in the literature, where too many codes are developed (McLafferty and Farley, 2006, Jones, 2007) and therefore reverted to manual coding, again with post-it notes and flip chart paper.

In the asynchronous online discussion forum, eight out of the fourteen nurses commented on the themes, although another also viewed the site. While five out of the nine lecturers viewed the themes through the Moodle site hosting the online discussion forum, only four commented. This could have been due to the time of year, as it was three weeks before the Christmas break. Two also identified difficulties in accessing the virtual learning environment used to host the discussion forum, and while they were able to do so, any technical difficulties are likely to reduce the interactions with the site and engagement in the process (Mokoena, 2013). However, those who did comment validated the themes and also highlighted issues that they had not raised previously but on reflection now felt relevant. For example, Andy reflected on one theme adding:

“Definitely agree if you’re a credible practitioner it’s much easier and almost feel like an advocate against prejudice for dyslexia. Some colleagues more supportive than others and better at wording things so don’t make me feel so silly”. Andy (School Nurse)

These issues were coded and added to the data within the themes.

The participants felt that the online discussion forum had allowed them to learn from others and Shirley reported that being involved in the study had also led to a change in practice within her department:

“We have been improving services within our team and faculty following participating in your work”. Shirley (Lecturer, School Nursing/Health Visiting)

Dominicé (2000) suggests that adults can learn from reflecting on their life histories and that of others. While he was discussing the experience of group reflections on whole narrative stories, I would argue that the participants also learnt from the themes identified and presented on the asynchronous online discussion forum. The participants also felt that it was a safe way of seeing how others felt about dyslexia and that they were not alone but it also elicited an emotional response in some:

“It’s been really good to see how we all share similar experiences - I wonder how many nurses are out there that have never been given the diagnosis. Reading people's comments/themes from interviews did make me very emotional - I think I need to reflect on that a bit more - I don’t know what feelings and emotions to attach to that right now - mix of sadness, anger and relief it’s not just me right now”. Danni (Specialist Mental Health Nurse)

Creswell (2014) suggests that member checking is important to increase the validity of the research, although Goldblatt et al. (2011) suggest that there are ethical issues related to this process including asking participants to relive difficult memories, risk of identification and that they may not feel able to challenge a perceived expert in the subject. However, I felt that it was important that the participants were included throughout the process to ensure that their voice remained at the forefront of the research (Mero-Jaffe, 2011) which is an important aspect of Interpretivist research (Lincoln et al., 2013) and the narrative approach (Atkinson, 2012).

Ethical issues

The ethics of narrative research are particularly important, as the participants can be vulnerable within narrative research. For example, reliving past educational experiences may be distressing to some participants, although it may also be cathartic (McAdams,

2008). This was managed as sensitively as possible, including giving participants time and allowing them to stop or withdraw from the study. Disclosure of dyslexia is also a sensitive issue. The nurse participants disclosed their dyslexia to the interviewer, but may not have disclosed to colleagues (Morris and Turnbull, 2007a). Confidentiality is of paramount importance in this process. For the second part of the study, the participants were asked to support the analysis of the finding through an online discussion forum rather than a face-to-face focus group to protect their anonymity as discussed previously. The participants had also agreed on the content of their narrative story to be used in that analysis. However, it is difficult to assure complete anonymity, although as many processes as possible were put in place such as changing names and giving limited detail about work area and grade of staff. Initially, participants were sent a participant information sheet (Appendix Two) to read before consent being sought for their involvement in the study as well as verbally explaining the purpose and requirements of the study to ensure informed consent.

Twitter involves the use of up to 140 characters per tweet, which does not allow for a great deal of information to be exchanged about the research for a potential participant. The Chair of the University Ethics Committee advised that an external internet/website link for further information was required and therefore before seeking ethical approval a website was developed to host participant information and the consent form (see Appendix Two). Even though ethical approval was obtained for recruitment of both nurses with dyslexia and lecturers through Twitter, it can be argued that the researcher needs to be constantly vigilant about ethical issues and that ethics approval is no guarantee of ethical practice (Henderson et al., 2013). In practice, while participants

were advised to go to the website where a contact form was available to email me, two potential participants chose to tweet to me instead. Tweeting back increases the visibility of their tweet, and direct messaging is not available if the person is not one of your followers. It could be argued that they had chosen to disclose publically that they have dyslexia and want to take part in the research, although Curtis (2014) identified that people are not always aware that their actions may make them searchable and therefore their information shared with a wider audience. Also, just as I would not directly contact potential participants and ask them to participate to avoid undue pressure, I did not directly message anyone to ask them to participate. I sent out information in the form of posters and links to the website and invited them to look at the site and to retweet the message to their followers to widen the recruitment pool being reached. Key groups were also targeted with a large number of followers and asked to retweet the information as advised by Khatri et al. (2015). A further ethical consideration occurred when I was asked by two followers if they could advertise my research in another arena; one asking me to send them details in an email. As ethical approval had been obtained for recruitment through Twitter, this offer was declined, although it could be argued that once the recruitment information had been posted on Twitter, I had lost control of where that information was posted. Ethically, the important issue is that participants are not coerced into taking part in the research and that they have informed consent (McElhinney et al., 2014). All potential participants were asked to read the information on the website prior to completing the consent form and this was checked through an email before the interview was scheduled and at the beginning of the interview.

As a registered nurse, I am required to report unsafe clinical practices (Nursing and Midwifery Council, 2015a). Gillin (2015) suggests that nurses with dyslexia are particularly vulnerable to research that could attribute unsafe practice to them and that this should be considered during the research. In the event of disclosure of any such practice, the participant would have been supported to self-report through the appropriate safeguarding procedures. Although if this option was declined, participants would be aware, through the information sheet that they would have been given before the interview, that I would be obliged to report them in line with the requirements of the Nursing and Midwifery Council Code (Nursing and Midwifery Council, 2015a). This did not prove an issue in the study.

Several ethical issues were encountered during the course of the research. Participants, both nurses and lecturers were asked to check their stories to ensure that the content was correct; there were no omissions and that they were happy for the information to be included in the study. The majority of the participants felt that the stories were an accurate description of what they had said, although one or two did comment on their expression. For one participant, this was a major issue and while they had been comfortable with being interviewed and discussing their story, they could not read their story to check it despite several attempts. This was obviously causing them some distress and therefore, while offering follow-up contact if they wanted it for support, we took the mutual decision for them to withdraw from the study. Their data, therefore, were not included in the thematic analysis and thematic analysis was based on the remaining fourteen stories.

Another issue that concerned several of the participants was identification. Care was taken to ensure anonymity as much as possible although it was made clear in the participant information that this may be difficult. Precautions taken included the use of androgynous names for the participants, not being too specific about areas of practice, as well as omitting ethnic origin. While it is recognised that gender and ethnic origin may have an effect on academic attainment and expectation (Richardson, 2008, Everett et al., 2011, McDaniel et al., 2011), this was a particular concern for several of the nurse participants and were therefore excluded from analysis within this study. The method of interview was also omitted from Table 1, as this would have increased the likelihood of identification of participants, particularly those who had been interviewed face-to-face.

Summary

This chapter has discussed the research methods used in the study and how these were adapted following the initial study and during the course of the research to enable the research questions to be answered. This chapter has discussed how the participants were recruited and how the process of template analysis was conducted and themes identified. The use of an asynchronous online discussion forum to validate the themes and to help maintain the voice of the participants was outlined. Ethical considerations were particularly important due to the nature of the topic, and the context in which the research was conducted and how these were approached were presented. The next two chapters will detail the themes that have been identified from the stories and asynchronous online discussion forums with the fourteen nurses and nine lecturers.

Chapter Five: Findings from Nurses

Introduction

The data presented in this chapter are the results following the application of template analysis and which were agreed and commented on by the participants during the asynchronous online discussion forums. The data from the nurses and the lecturers were analysed separately and are therefore presented independently in this and the following chapters. As discussed in the previous chapter, androgynous names were given to represent the participants. Participants will be referred to throughout the chapter as they or them to prevent the gender from being overly disclosive.

Findings from Interviews with Nurses

The following themes were identified following the use of template analysis and verified by the registered nurses, which can be divided into two overarching themes of how dyslexia had affected them as a nurse and how dyslexia had affected their learning. These are presented in **Error! Reference source not found.** Table 4 below and will be discussed in the following sections.

Dyslexia and Impact on Learning

Role of parents and family

Parental and family support was raised as an important issue throughout the interviews, although the support varied depending on the relationship and the personal resources that they were able to draw on. Supportive parents that were financially able sought extra support for their child and protected the child when teachers made comments about their academic ability. Sam was diagnosed with dyslexia in primary school. Their interested in dyslexia and had identified this as an issue. For many other participants,

Table 4: Themes from Nurse Interviews

Themes from Nurses	
<p>Dyslexia and Impact on Learning</p> <ul style="list-style-type: none"> • Role of parents and family <ul style="list-style-type: none"> ▪ Support of parents and family ▪ Relationships with parents and family ▪ Role of Teachers <ul style="list-style-type: none"> ▪ Comments from teachers ▪ Support from teachers ▪ Role of specialist teachers ▪ Consistent academic support ▪ Preferred Learning Styles <ul style="list-style-type: none"> ▪ Practical learning ▪ Active learning ▪ Teaching methods ▪ Understanding ▪ Change in academic level ▪ Visual Learning ▪ Learning Choices <ul style="list-style-type: none"> ▪ Requirement of role ▪ Effect of dyslexia on learning ▪ Passing knowledge to others ▪ Career progression ▪ Self-development ▪ Use of technology ▪ Availability ▪ Psychological aspects <ul style="list-style-type: none"> ▪ Emotional responses ▪ Wanting to prove themselves ▪ Positive aspects 	<p>Dyslexia and Impact on Nursing</p> <ul style="list-style-type: none"> • Career choices <ul style="list-style-type: none"> ▪ Previous experience ▪ 2nd Choice ▪ Difficulties caused by dyslexia • Effect on Practice <ul style="list-style-type: none"> ▪ Time ▪ Documentation ▪ Stress and tiredness ▪ Distraction ▪ Drug administration ▪ Teaching others • Compensatory strategies <ul style="list-style-type: none"> ▪ Extra effort ▪ Minimising distractions ▪ Preparation ▪ Reliance on memory ▪ Disguise ▪ Use of information technology ▪ Use of templates ▪ Verbal skills • Decision to disclose <ul style="list-style-type: none"> ▪ Support for study ▪ Not wanting to be different ▪ Need to know basis ▪ Comments from staff ▪ Supportive work environment • Support from others <ul style="list-style-type: none"> ▪ Colleagues ▪ Managers

their parents paid for extra tuition for them with a specialist teacher or with additional support before GCSEs. In another case, Vic attended a private boarding school for sixth form, and it was there that they identified that they had dyslexia.

However, parental support was not always focused on financial measures as both Jo and Jamie identified that they both used their mothers to proofread their work, although this extra assistance may have masked some of the potential problems at school, leading to a later diagnosis.

“She always used to check them for me and make sure that they made sense and everything. She was really good. She still does it now but make sure. She is my second to read it.” Jamie (Adult Community Nurse)

Many of the participants identified at least one close family member who either had been diagnosed as dyslexic, or they suspected might be. If this was a parent, it affected the support that they could offer academically. Pat felt that because their older sister had been diagnosed with dyslexia, it affected them receiving a diagnosis as the sister’s dyslexia was far more obvious and Pat was seen as just being lazy.

However, parents were also seen as important in developing confidence and support for continued education:

“He would always say to [name], when I talk to you, you know, you’re really, really making sense; it’s just that you can’t write it down. So I think that’s something quite important – when you’ve got somebody who says that’s your academic results but that’s what I’m seeing in front of me. So that’s why you get that- It keeps you confident.” Dom (Adult Specialist Nurse)

Charlie also had a difficult relationship with their mother who was unwell throughout their childhood and died when Charlie was in their late teens. Charlie was the main carer for both their mother and younger sister, and this had a disruptive effect on their schooling, and they were also withdrawn from school in year five for six months due to

problems with a teacher. Charlie's mother also tried to be supportive when well but this did not always have the positive effect:

"Mum [was] as supportive as she could be. She did try to take over sometimes too much and I think that was it trying to overcompensate. When she was well she would say 'let me try and do this because I haven't been able to help you the last few weeks'. Support at home would be one extreme or the other and that doesn't help. It makes learning quite difficult." Charlie (Mental Health Nurse)

Several of the participants also described how there were low academic expectations of them in the context of their family lives as children. These were often the participants who were identified as having dyslexia in later life:

"I was expected to go and work in the factory with my mum and my brother was expected to go and work down the pit with my dad. So yes my parents were absolutely devastated when I said I wanted to be a nurse." Lesley (Paediatric Nurse)

While it can be seen that parents had a great influence on the early lives of the participants, the narratives also discussed the role of teachers and lecturers and their influence on learning experiences, and this will be addressed in the next section of this thesis.

Role of teachers

For many participants, teachers at all levels were identified as having had both a positive and negative effect throughout their learning careers. All had experienced negative comments from teachers in school, although Sam who had the earliest diagnosis of dyslexia reported the most positive school experiences:

"I always enjoyed school; I never had any problems in school. Basically, as I have gone through education, as I have been able to focus on things that I have been more interested in I have enjoyed it more." Sam (Learning Disability Specialist Nurse)

In school, many were told that they were of a low academic ability. This was particularly demonstrated by a quote from Jo:

“I was told by teachers that I would stack shelves for the rest of my life, that I would never amount to anything because I wasn't clever enough.”
Jo (Adult Nurse, Nursing Home)

Dom was encouraged to become a nurse due to academic expectations with a teacher saying to their parents:

“.. will never achieve anything academically but [] a really nice [].
Perhaps ... should go into nursing.” Dom (Specialist Adult Nurse)

Many of the participants also described being told by teachers to work harder and to concentrate more. An inability to proof read was a problem for many of the participants, one which they found distressing when it was constantly commented on:

“I was always accused of never proofreading my work, which I found completely frustrating because I totally proofread it and read the same thing wrong 20 times.” Adi (Renal Nurse)

For others, the role of teachers meant participants in this study felt they disengaged in classroom learning at school as they were in the lowest ‘learning sets’ with children who did not appear interested in learning. For example, Jo noted that:

“I wasn't different to anybody else. It was normal to sit with your feet on the table in lessons because that's what everybody else did so that's what you did. I wouldn't take my books out because nobody else did”
(Jo Adult Nurse, Nursing Home)

In contrast, Jamie felt that because they were not failing they did not get the support that they could have in school:

“I think it is probably because in the secondary school they had probably students who needed more help than I did, so they probably thought that if [] is doing alright, let them get on.” Jamie (Adult Community Nurse)

There were also more positive experiences in school with all of the participants describing teachers who were more supportive. This was particularly important for Charlie as their home situation meant that school was seen as a sanctuary:

“Overall secondary school was very positive for me. It built my confidence a lot both in my academic work and in myself. And it was away from home; it was a bit of an escape really.” Charlie (Mental Health Nurse)

Six of the nurse participants had their dyslexia formally diagnosed at university and this was initially identified by a personal tutor. For some this was at the beginning of their nursing course, for others it was at a later stage or during postgraduate study:

“I submitted my first essay and then met with a lecturer on another essay, who was proofreading them to help us get into the swing of the academic writing and it was her that said I think you need testing”. Ashley (Adult Intensive Care Nurse).

During postgraduate study, Lesley described how an educational psychologist had questioned how they had managed to get a Masters qualification and have dyslexia:

“I think she was questioning both my dyslexia and my ability; then she started to question my qualifications”. Lesley (Paediatric Nurse, Education)

Clear, structured feedback from lecturers was also important to many of the participants without writing all over the script, as well as being told what they should be writing, not always what was wrong:

“What I want is for you to tell me what is right in this paragraph. Don’t tell me what’s wrong; tell me what’s right, so I can repeat it”. Dom (Specialist Adult Nurse)

In addition to ‘mainstream’ education support, specialist dyslexia teachers were accessed by Jo during Further Education and by Charlie and Jamie during Higher Education, with Sam receiving it during primary and secondary school. The role of

specialist support received mixed views from the participants; for example, Adi described how they had worked with a specialist teacher during her nurse training:

“She was teaching me what they expected me to write, and that made a huge difference really. I had not automatically realised what they expected me to write.” Adi (Renal Nurse)

Alternatively, Charlie discussed how they had accessed specialist support during their training but had found it difficult to find the time to attend the additional sessions along with other commitments. Charlie also described that the tutor that did not know what assignments they were working on:

“I had to try and explain what the assignment was about. That's not easy either when I wasn't sure because that's what we're writing about to see if we have got an understanding.” Charlie (Mental Health Nurse)

Danni also felt that their specialist support was not very helpful to them or individualised and may have been detrimental:

“And it just kind of felt like people just wanted to instil this way of working on me, and it was almost like it felt like one-size fits all. I'd managed to get to university and I'd managed to cope for as long as possible and I'd clearly found some skills and what were they and were they- were they still viable?” Danni (Mental Health Specialist Nurse)

What did seem to help several of the participants was consistent academic support with one teacher or tutor who knew how to feedback in an appropriate way for them and where the feedback was clearly structured. This was particularly discussed by Charlie:

“It was helpful having consistency then with my first level 6 writing to have the consistency of the same personal teacher for the whole way through. She knew the best way to feedback.” Charlie (Mental Health Nurse)

Overall, the role of the teacher, either at school or the lecturer at university was extremely important to all of the nurses. The teacher had a profound psychological effect, depending on how they engaged with the participant. Consistent academic

support in a manner that was congruent with the nurse's preferred format and recognition of compensatory strategies was important to the nurses later once at university. The support from specialist teachers was seen as beneficial but not always accessible and not helpful unless individualised.

Preferred Learning Styles

In addition to the support of teachers, most of the participants also described a strong preference for very practically focused learning. Indeed, Sam described liking this style of learning but wanted a practical session that was followed by theoretical learning:

"I like doing it the other way as well, so I like being in a practical situation and then thinking what's going on there theory wise." Sam (Learning Disability Specialist Nurse)

Jo, Vic and Jamie described watching others and then wanting to try out practical activities themselves:

"I learn on the job. I am a much more active learner in that way. You show me something I will remember it." Vic (Acute Adult Nurse)

All of the participants except Vic cited reading as a way of learning, who felt that this way of learning did not suit them:

"I am no good at learning from books; it doesn't do it for me. I learnt everything I know about what I do, in my opinion from working, not from reading books." Vic (Acute Adult Nurse)

Of the participants, only Sam felt that they could learn effectively from a lecture, although this did depend on the lecturer and whether they felt engaged and interested in the material being presented. In contrast, other participants found lectures more challenging, especially taking notes at the same time, as they couldn't listen and write concurrently as explained by Vic:

“I didn’t like big lectures. I don’t do well reading from big screens. Even with my fast writing, it was too slow, and I can’t listen and write at the same time. It doesn’t work.” Vic (Acute Adult Nurse)

Charlie had recently completed a course with an assessed presentation and had got a good mark for that because they were able to vocalise their knowledge more effectively than write it:

“It went really well because it's talking it through, so not much on the slide but I can elaborate through talking. So, I came up with a great grade for that, so maybe I’d go for more courses that have got mixed marking criteria.” Charlie (Mental Health Nurse)

However other participants such as Jamie, Jo and Sam found presentations more difficult, especially reading out what was on the slide, and Sam often memorised what was needed to be said, rather than read it. This was something that had been learnt early in childhood when asked to read out from a book in English lessons:

“I would be so worried about it because I knew I couldn’t do it that I would calculate which paragraph it was going to be that I was going to read and quickly practice it and check that there weren’t any words that I couldn’t read.” Sam (Learning Disability Specialist Nurse)

Both Vic and Jamie found that changing academic levels caused them specific difficulties.

Jamie discussed this particularly effectively:

“Every time I changed academic level I almost went back to stage one again. As I memorised each way of writing the new assignments it seemed to be alright, and I seemed to level out.” Jamie (Adult Community Nurse)

In summary, it can be seen that while the discourse about their learning styles did vary between participants, there was a preference for learning that actively engaged the nurses and once qualified they were more able to choose the learning that they engaged in. This will be explored further in the next section of this thesis.

Learning Choices

All of the participants had actively engaged in learning throughout their post-qualification nursing careers, both formally and informally. Some of this activity was a requirement of the role that they were in, such as mandatory training in manual handling and basic life support, whereas other learning was for either role or self-development and this will be illustrated within this section.

All except Jo had accessed a mentorship course, although Jo was taking an adult teaching course at the local college. As noted earlier in this thesis, mentors are required to support student nurses in practice, and the mentorship qualification is a requirement for promotion, although often not the easiest course to achieve:

“Mentorship is not one I wanted to do but I want to go, I want to get my degree behind me, and we do an internal ICU² course, or an ICU degree that they want me to do next year. I’m not looking forward to it because it is a lot of documentation. But, it’s the one they want everyone to have, and for progression, I need to have it.” Ashley (Adult Intensive Care Nurse)

Instead of undertaking a mentorship course Jo had chosen to complete the teaching course to pass on their knowledge:

“I enjoy passing on my knowledge to other people and trying to help them.” Jo (Adult Nurse, Nursing Home)

Charlie had chosen to complete the mentorship course at degree level to see if they could achieve at that level and then continued on the degree pathway when they had developed the confidence from achieving good grades. Charlie was also one of only three participants who did not already have a degree and felt that it would be a requirement for career progression:

“I honestly think in the next 5 to 10 years if you want to get promotion to band six you will need a degree anyway.” Charlie (Mental Health Nurse)

² ICU is the abbreviation for Intensive Care Unit

As nursing has now moved to be an all degree profession, there are increasing pressures on qualified nurses to gain a first degree, and promotion to more managerial and nurse education positions are also often linked to a Master's degree. The participants reflected on these developments in their interviews with Vic commenting that they had started on a 4-year honours degree programme but chose to leave without the honours because of the dissertation requirements which "scared them". Sam had chosen to complete the Master's programme to develop a role because career opportunities were limited in their area of work. Both Andy and Kelly discussed how dyslexia and learning choices had affected their career progression:

"This is as high as I am going to go because I've got these barriers to learning identified and all the problems that I've had. Since I've been here really. Yes so it makes me, so I don't know, I have sort of come to terms with it really." *Andy (School Nurse)*

"I don't think that dyslexia has held you back; I know it has, without doubt. I think it holds me back on every day- everyday stuff that people take for granted." *Kelly (Adult Intensive Care Nurse)*

However, the need to challenge themselves was another common theme within the narratives and learning was seen as a way of doing this. Another theme expressed was self-improvement both as a nurse and personally which influenced their learning choices. For some, this was to address areas that they felt they had a weakness in and for others, it was to maintain and progress their professional skills and knowledge:

"It improves my practice and keeps me focused and makes me question why am doing what I am doing. I don't want to become one of those nurses who is doing what they've always done because they really bug me." *Charlie (Mental Health Nurse)*

While none of the participants identified that they read for enjoyment, all discussed reading either textbooks or articles as a way of increasing and updating their knowledge and understanding:

“I read a little bit of everything, journals and books and if they have dedicated websites I will read those as well. I have wound care magazines that I can look through and I have got books at home that I can use for reference just to make sure that I have got all the information.” Jamie (Adult Community Nurse)

Many of the participants talked about how they learnt from others from role modelling and also through discussion:

“When I was a student I would watch what the mentor was doing and take quite a lot from that and then try and apply that to my practice and lots of discussions. We've got OTs in the team and I learnt loads from them by discussing, you don't just look at it from a nursing point of view.” Charlie (Mental Health Nurse)

While many of the nurses had been given access to assistive technology such as text to speech or speech to text; this was not effective unless the teaching was in place to support it. This was very graphically illustrated by Danni:

“The difficulty with that was nobody ever taught me how to use the programmes, so they sat in their box for the four years of my degree.” Danni (Specialist Mental Health Nurse)

Word processors, spell checkers and voice recorders for recording lectures were seen as useful, although this was not effective in helping with the structure of assignments or identifying the wrong word used but spelt correctly.

As Twitter was used as a method of recruitment for this study, it was not surprising that it was seen as a good method of learning by several of the participants, particularly sharing of information and networking amongst practitioners. However, the way that this information is presented was also seen as beneficial:

“What I like about it is that I can see things in a small amount of characters that I can very quickly understand and then if it’s something that I want to learn more about, I know I can then kind of click on that link in my own time.” Danni (Specialist Mental Health Nurse)

YouTube was seen by several as a good method of learning new skills and also to help with pronunciation, although American accents could be a problem:

“If I've seen some lectures on YouTube videos which might explain a topic, they might cover certain words that I might not necessarily be able to read and recognise, first time because of my dyslexia. If I've got used to the terminology and the words they use, I can then go away and read a piece of paper knowing that, oh, I can identify that word.” Kelly (Adult Intensive Care Nurse)

Danni also discussed liking e-learning as this could happen at their own pace.

Psychological Aspects

Throughout the narratives of the nurses, the psychological effects of dyslexia were prevalent and affected many aspects of learning. All of the participants used the word ‘frustrated’ within their narratives. In the case of Vic, it was related to having to work so hard when they felt that others found it easier in the class. Charlie described being ‘frustrated’ in that that they were unable to put on paper what they could verbalise. Sam got frustrated with themselves as a child because they couldn’t read as well as others, whereas Jamie got frustrated with other people’s lack of understanding as they said:

“I get frustrated with some people when they say you have got to watch this because you can’t physically see it and I don’t think they get that.”
Jamie (Adult Community Nurse).

For other participants who were diagnosed later, the diagnosis did not entirely come as a shock, but caused mixed emotions:

“I was 23, but I wasn't surprised. I think relief more than anything because I really struggled with the assignment writing. I had gone

through my whole schooling life and nobody had picked it up and was quite angry at school.” Charlie (Mental Health Nurse)

Jamie also discussed anger at not being diagnosed during school and how they might have done better if they had. Initially, they found the diagnosis quite difficult:

“Initially I felt I was walking around with a label on my head but then after a while, I was like ah that’s what I am and if it gets me the help that I need to help me get better results in my work, I don’t mind.” Jamie (Adult Community Nurse)

Jamie and Jo spoke about feeling that they needed to prove to others that they were clever, particularly teachers and could do the work. Sam didn’t seek extra time during their nursing degree because of this:

“I think I only had one written exam in my nurse training and I prepared for it quite well, and I think I decided not to take the extra time. Maybe it is like a pride thing and to prove that I could do it.” Sam (Learning Disability Specialist Nurse)

While Jamie and Vic discussed how they felt that they were clever, Charlie stated that they “didn’t feel so thick now”.

On a more positive note, Jo felt that their experiences had made them a stronger person and Jamie felt they were better able to support others as they had greater empathy.

Charlie felt that they might have taken a different path in life and not become a nurse at all if they had been diagnosed earlier and received support:

“I might not have done nurse training if they’d have done it in reception and I’d have gone and done something really boring.” Charlie (Mental Health Nurse)

Overall, the nurses all identified that dyslexia had affected their attitude to learning, their preferred learning styles and their ability to learn effectively and therefore their learning choices. Support from teachers and parents and family were seen as being crucial in helping them to develop their potential, but comments from teachers could

impact on their psychological and emotional response to learning. How these themes and subthemes relate to the concept of the impact of dyslexia and learning are presented pictorially in Figure 5 below.

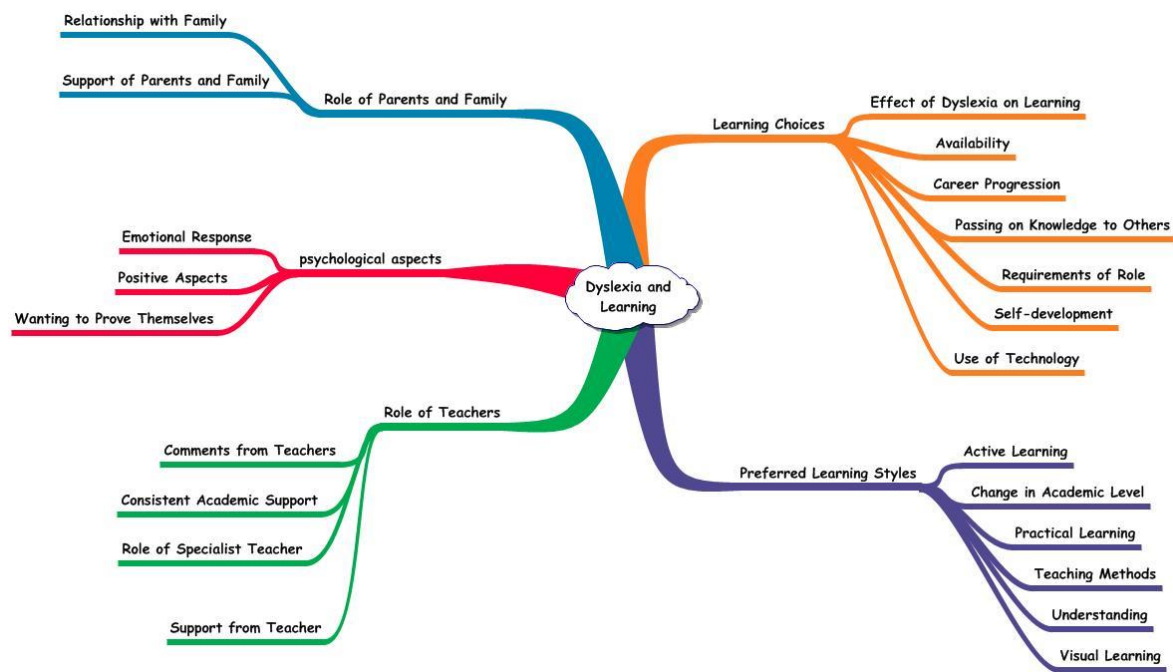


Figure 5: Dyslexia and Learning Sub-themes

Dyslexia and Nursing

Career Choices

As discussed in the introduction, nursing is now an all graduate profession, and there are currently four fields of speciality that can be chosen during pre-registration training: adult, mental health, learning disability and child (Nursing and Midwifery Council, 2010b). Midwifery is a separate programme although a shortened course is available for nurses to transfer to this profession (Nursing and Midwifery Council, 2012c).

Both Vic and Jamie originally wanted to be midwives. However, in reality, this is a competitive area of work that results in the academic requirements for midwifery often

being higher than the minimum academic criteria set for nursing. Jamie had not been able to get onto a midwifery course and had taken a place on an adult nursing programme instead. Vic's mother had not allowed them to take the direct entry midwifery course insisting that they became a nurse first, but because they had hated university so much during the nursing course, they never went back to become a midwife.

Once they had entered the nursing profession, all participants made choices about their on-going careers. Sam, Jo, and Vic discussed difficulties that led them to leave their area of work. For example, Sam described leaving nursing for a year and going to work for a children's charity:

"The area that I was working in when I moved back as a staff nurse was going through some difficult period with lack of management and it was just a really difficult time, and because I was newly qualified I wasn't really in the position where I had the knowledge and skills to deal with that." Sam (Learning Disabilities Specialist Nurse)

Vic described how they felt too young to undertake an emotionally difficult specialist role and the other staff were too busy to teach and support them, so they left and went to another area of practice.

Other participants explained how having dyslexia either affected their career progression or options, as they had not been able to achieve higher level qualifications:

"I'm held back because I don't have a degree and I don't engage in academic courses." Kelly (Adult Intensive Care Nurse)

"Australia they don't take diploma-level nurses, they only take degree levels, and I haven't got my degree so, and I can't go." Reese (Theatre Nurse)

The choice to become a nurse was often influenced by either family role models or

previous experience with the health services:

“I chose to be a nurse because I loved being with people. I had been exposed to mental health through family. So, my mother had depression, and my nana had Alzheimer's, so I did have contact with mental health services and took on the role as a young carer for a while. But I think I'd always wanted to be a nurse.” Danni (Mental Health Specialist Nurse)

When qualified the choice of career path was often influenced by their experiences in

practice and support from the team:

“I chose the nursing home and came back because I wanted out of the hospital environment and going into the private sector was something different, and I found that I was more able to do more with the residents if that makes sense, instead of paperwork, which is what it was on the ward.” Jo (Adult Nurse, Nursing Home)

Effect on Practice

At the start of this study, the issue of dyslexia and patient safety was highlighted as a potential issue. Most of the participants described how distraction affected their writing and concentration, giving examples of how they would include other people's conversations in their writing, which could be a problem in a busy practice setting:

“I have to read it off in- not in silence but without other dialogue that my brain is trying to process. I might be trying to forcefully ignore what someone's saying over there in the corner but if I'm reading it's like having two stereos on at once.” Kelly (Adult Intensive Care Nurse)

Unsurprisingly documentation was an area that caused some difficulties for the participants. The handwriting of others, particularly deciphering poor handwriting, was identified as a particular problem that they felt was made worse because of having dyslexia. Participants were very aware of their professional accountability and would seek advice if they could not read the writing:

“I know that I have an accountability and I won't go second guessing, for example. So I would contact the prescriber, and I make a joke of it

sometimes with some of the doctors, and I'll say when's your birthday?
And they go, oh, it's June, and I say, oh, I'm going to get you a stencil so I
can read your writing." Kelly (Adult Intensive Care Nurse)

Reese described not being able to write fast enough sometimes when asked to write up
surgeons' instructions and having to ask them to be repeated several times. This did not
always receive a supportive response when they asked for help:

"There was one case the patient was under a local anaesthetic, and you
know given an antibiotic so I asked how to spell it and I got told off
because I asked how to spell because it doesn't look professional." Reese
(Theatre Nurse)

Reading also took longer for some, as well as the handover of patient information
between shifts. Vic spent hours completing care plans to a high level to ensure that no
one commented on them:

"My care plans were impeccable, but I was spending 4 hours a night
doing care plans." Vic (Acute Adult Nurse)

Jo described how on the first ward as a qualified nurse they felt that they were spending
too long on their documentation. This was exacerbated by colleagues making them
rewrite care plans that they had written or them writing them out in rough first. Charlie
was aware that they took longer and allocated time in their work schedule, staying
behind if they had to, to complete particularly sensitive documentation.

All of the participants described not being able to proofread their work effectively. Sam
found this particularly difficult:

"The thing that affects me the most is reading back on my work and not
being able to find my mistakes." Sam (Learning Disability Specialist Nurse)

All of the participants discussed drug administration, being very aware of their
accountability for patient safety and taking extra care both in administration and
calculations:

“I am exceptionally careful with drug administration. I think perhaps I am more careful than others. I think that there is too much emphasis on speed. You know if someone has to wait three minutes extra for an antibiotic it is not going to kill them.” Vic (Acute Adult Nurse)

“I have very few maths neurones and therefore the ones that are functioning I tend to use for drug calculations and drug calculations alone. I can’t work out if I’ve been given the right change in shops, but I can calculate drugs. I can sit down with a pen and a bit of paper, and I can work that out.” Lesley (Paediatric Nurse, Education)

Andy took this extra care to an extreme, avoiding drug administration unless supervised, something that they were able to do on their current grade but caused difficulties within the team:

“I won’t do the clinic on my own; I won’t do it on my own. I don’t tell them my reasons; I just make excuses for why I don’t do it and why I am not available. I haven’t got the confidence of trusting myself with something that clinical, what if I get the wrong drug, what if I give the wrong ... I mean the doses are fine, I am happy with that but just, no, no, don’t want to, I’ve had a horrible experience there, and I don’t trust myself. It’s the lack of confidence.” Andy (School Nurse)

Lesley explained the concept of reasonableness in drug administration:

“I write it out and I visual, I do a guesstimate, and then I try and visualise what does that look like. I think that doesn’t look right so this amount that I’ve calculated cannot be right and therefore I’d go back and look at the numbers.” Lesley (Paediatric Nurse, Education)

Pronunciation of drugs also caused some participants problems that made it difficult when asking for drugs for patients, as well as for spelling.

Shift work, as well as the physical and emotional requirements of the role, makes nursing a demanding career. Stress and tiredness appeared to make all the participants’ symptoms of dyslexia worse, especially spelling and written documentation:

“Stress definitely makes my writing worse. If I’m stressed and trying to rush, I’ll definitely notice that, whether it’s my concentration or just

simple spellings and I'm like I can spell that, and I have to really think the simple stuff." Ashley (Adult Intensive Care Nurse)

Sam explained how they had adjusted hours to enable them to have a lunch break:

"I normally take an hour for lunch, and I find that that makes a huge difference to your concentration and energy levels. I know lots of people can't do that." Sam (Learning Disability Specialist Nurse)

Charlie described symptoms of dyspraxia that co-occurred when tired or stressed:

"The more stressed the worst my dyslexia was and dyspraxia then starts coming in. I didn't sleep well last Sunday, and all I did on Monday was walking into everybody and notes weren't great either but I had a good night sleep on Monday and Tuesday it was better. The more stressed I am, the more tired I am, the worst is." Charlie (Mental Health Nurse)

Time appeared to be another common issue for the participants. The time taken to complete documentation to an appropriate standard and double checking:

"I've always accepted it takes me twice as long to do things as anybody else; I always accept that because it's the way I do it really, it's how long it takes me to do it." Andy (School Nurse)

"I would take much longer to learn how to do something." Dom (Adult Specialist Nurse)

All of the participants had either completed a teaching course or were planning to shortly. Several of the participants had the education of staff as a major part of their role. They often felt that having dyslexia made them better teachers:

"Because I learn differently, means that because I've taught people and I enjoy teaching, I can come at things from a very different angle." Pat (Adult and Paediatric Acute Specialist Nurse)

"I don't know, it kind of makes me feel good to be able to explain stuff to other people as well because it makes me better that she understood it as well. And I'm doing things right." Ashley (Adult Intensive Care Nurse)

As can be seen, all of the nurses recognised that having dyslexia impacted on the practice as a nurse and were acutely aware of their need to compensate for this to maintain patient safety.

Compensatory Strategies

All of the nurses had developed compensatory strategies to enable them to have registered as a nurse and to maintain their professional responsibilities. Some were very effective and would be of benefit to all nurses; however, others were less positive.

Several of the participants discussed how they avoided certain words that they couldn't spell or disguised their spelling in some way:

"I know I can't spell diarrhoea, so it's always loose stools." Pat (Adult and Paediatric Acute Specialist Nurse).

"I was scruffy because I was trying to hide that I can't spell." Andy (School Nurse)

All of the participants described the extra effort that was required, either with learning new tasks, writing or being extra cautious to avoid mistakes. Several also described writing and rewriting notes and assignments to ensure that they were correct:

"I need to understand; I can't, I won't remember stuff because I have been told it, I need to understand it. To over-learn it to a certain degree so that you keep doing it over and over again until it clicks." Adi (Renal Nurse)

Jo described how they spent time practising at home:

"I used to go home and practice handwriting for ages just to see if I could keep my handwriting legible and neat so that anything for a legal reason it would be able to stand up in a court of law." Jo (Adult Nurse, Nursing Home)

Danni explained how the extra effort made them more tired and Dom discussed having to keep reading good examples of work to ensure that they were on track and keeping

to the correct structure. Others described how academic work took them longer:

“I figured out as soon as you got the essay that I would start working on it quite early. I would always do the multiple drafts as I understood more, I could never and I’ve never been someone who leaves stuff to the last minute.” Pat (Adult and Paediatric Acute Specialist Nurse)

All of the participants tried to minimise distractions as much as possible so that they could concentrate on what they were writing or reading:

“I will take myself off somewhere where I don’t get distracted, so I’m not hearing the phone and things like that. It’s quite difficult because people will try and come and find you if they know you’re about somewhere, it’s just annoying in a way.” Pat (Adult and Paediatric Acute Specialist Nurse)

Many of the participants explained how they had to be organised to ensure that were able to function appropriately at work, avoiding cluttered work areas and trying to pre-empt what was likely to happen next. The use of lists and checklists were also mentioned by many of the participants to help them remember what they had to do and to organise their workloads. Andy described the use of what they called “idiot sheets” with processes and checklists to remind them, even if they undertook the process/procedure regularly:

“I have to have idiot sheets for things, even getting into my computer now after having it, I call it an idiot sheet, just a sheet so I know exactly what the password is, what this, this and this is. You know because I might forget it today. I mean, you know I’ve had it for the same five years, but it doesn’t mean it’s there.” Andy (School Nurse)

Ashley and Kelly both explained how they wrote their patient records as they went during the day rather than at the end of a shift:

“I’ve learned to cope and avoid that by doing my notes as I go rather than having a mammoth writing session at the end of a 12-hour shift.” Kelly (Adult Intensive Care Nurse)

Sam tried to read all the documents before a meeting whereas Jamie prepared what they were going to do the next day the night before:

“I just try to be organised like the day before and try to have everything written up the day before or organise things a day ahead just so I can get everything done. It gives me more of an order to my day, so it makes it easier on me the next day.” Jamie (Adult Community Nurse)

For a training session, Sam prepared the whiteboard so that it would not be necessary to write in front of the class and also to ensure that all the important aspects were covered:

“I sometimes write on the board before the session. That was a strategy for two reasons; one is so I wouldn’t have to write it in front of everybody and the other was to remind me to cover it.” Sam (Learning Disability Specialist Nurse)

Several of the participants explained how they used their memory in everyday practice:

“I think I have got a good memory for stuff. Once I have remembered something I generally won’t forget it.” Sam (Learning Disability Specialist Nurse)

“I remember things related to the patients like other people look at the patients' prescription, and for various information, you know the dialysis prescription. I know it; I just look to check that nothing has changed. I look at the person, and I go yes, I remember that that person needs this.” Adi (Renal Nurse)

All participants described how they had spent time going over important information over and over again to commit it to memory, although Andy in particular found that their memory was not entirely reliable so they relied on written prompts:

“I've written in the back of here, how I record it all, so I have got it all done. And I have to refer to it every time I do a recording. Especially when I come back after the summer holidays.” Andy (School Nurse)

Dom, Sam, Jamie, Vic, and Charlie all felt that they had developed good visual memories and in particular were able to remember things that they had been shown or that they had seen quite quickly:

“I do definitely remember things visually. I will say stuff to people, people will say something about a book and will say yes it is a purple book, and they will have no idea what colour it is but I will. I probably have to

compensate being able to be clear verbally and visual memory.” Sam
(Learning Disability Specialist Nurse)

All of the participants felt that the use of word processor was beneficial to them when writing reports or documents and this was illustrated by Jamie:

“I think I would pick more of my mistakes on the computer because I will go back and realise that I have written it wrong and delete it.” Jamie
(Adult Community Nurse)

The use of spell checkers was also seen as being particularly important:

“I do heavily rely these days on spell check and Word documents. If I didn’t have those I think I would really, really struggle.” Danni (Mental Health Specialist Nurse)

However, spell checkers were not always effective as the wrong word was used or they were in the wrong order.

Some had the opportunity to use specialist software, although often not taught how to use it effectively:

“I do have a medical spell checker on my PC, so I have had, I can’t say that I haven’t had any support and I’m about to get some Dragon software or other that I can talk to and it talks back to me or something I don’t know what it does exactly, but apparently it’ll help me.” Lesley (Paediatric Nurse, Education)

The use of voice recorders for practice was not something that was really discussed, although several participants had been issued with them, especially as students. Ashley explained how they found a voice recorder beneficial in lectures, something that was also offered to Jo on a recent course:

“I did get a Dictaphone, so I used to sit quite close to the front of the class, and tutors were pretty good after they got to know. I could then listen back to the notes and pick up on other points that obviously I hadn’t managed to write down and stuff.” Ashley (Adult Intensive Care Nurse)

Kelly, Sam, and Jo discussed the benefits of electronic healthcare records that allowed them to have structure, spell checking and to identify mistakes more easily. Electronic health records also reduced the problem of not being able to read handwriting. Jo had moved to a nursing home where the care plans were electronic after having a lot of difficulties on a medical ward:

“When I was at the nursing home it was all computer-based so that was a lot easier because you could type it, it had auto spell, and it was all programmed up to be nursing led.” Jo (Adult Nurse, Nursing Home)

The use of template documents seemed to feature quite highly in most of the stories.

Most participants had a set way that they structured documentation, either using previously validated examples or having developed a system that had worked previously for them:

“So, what I tend to do is any piece of work that I’m doing I tend to sort of design a template for it in the sense that I can break down my thinking and how I need to get my notes and ideas and thoughts down.” Danni (Mental Health Specialist Nurse)

“I have another risk assessment that I’ve done that the doctors have had input into, so it does compensate in that way for it because I know that the structure is right and this is what I need to try and follow. I do that for a lot of things.” Charlie (Mental Health Nurse)

This also extended to academic writing, with their own previous work used to help structure assignments or the use of exemplars.

In certain areas, such as intensive care, the documentation helped to provide that structure:

“We get documentation that gives us structure. So, we have a daily care plan, which goes through the systems, or to start with their way. It’s all like tick stuff on the front, but it’s three, three pages, so it’s all quite well structured in place. It helps big time.” Ashley (Adult Intensive Care Nurse)

Most participants described preferring to use verbal to written strategies when trying to get their point across to people:

“There have been a couple of occasions where things have been quite complex that I've actually said I'm not prepared to have these discussions over email; I want to have them with human beings in person. I could misread something or not understand something or somebody could misread, or I might not be able to articulate it properly on paper, whereas I'm more than capable of articulating it verbally.” Danni (Mental Health Specialist Nurse)

For Jamie, this extended to being able to have a viva for their dissertation at university:

“When it came to my dissertation they let me do a Viva so I could explain my ideas as well, to make sure that I got the best mark that I could, which did help me improve my score for my dissertation which was nice.” Jaime (Adult Community Nurse)

Decision to Disclose

Disclosure was identified as a key issue in the original literature review and the actual conduct of the research. All of the participants discussed comments from staff affecting their decision to disclose, either having a positive effect or inhibiting disclosure. These included staff discussing how nurses with dyslexia were unsafe and should not be allowed, being treated as if they were stupid, staff not believing that the nurse had dyslexia or others disclosing that they had dyslexia too:

“I had to disclose the dyslexia, and at the start of my second year I disclosed to my mentor in the first few days, and I got treated like I was an idiot for the rest of that placement and it was horrible.” Pat (Adult and Paediatric Acute Specialist Nurse)

Jo did not disclose on their first ward after qualifying as a nurse as they didn't want to cause a problem but this was not a good experience. Comments from staff regarding

spelling in patient notes necessitated disclosure. This disclosure did engender some support although not always in a positive way:

“They said ‘why don’t you keep a book of spellings in your pocket’ so that’s when I started to write words down. I think was meant to come across in a supportive way but it was in the middle of handover so there were a people lots of people around so it didn’t feel very supportive.” Jo (Adult Nurse, Nursing Home)

Vic had told their current manager although the wider team is not aware. They relayed an experience of a comment from a colleague that made them very angry:

“I heard a wonderful comment from a colleague of ours at Christmas time in the middle of the night ‘oh dyslexic people shouldn’t be allowed to be nurses or doctors because they make mistakes and do the wrong thing.’” Vic (Acute Adult Nurse)

They went on to discuss their concerns about disclosing dyslexia in this environment and that they felt that disclosure should not affect how people were perceived as a professional but they felt the stigma of dyslexia was almost as significant as that of mental illness:

“There is a concern that you will be judged but actually if they didn’t think that you were dyslexic yesterday, and you managed to do your job fine, and you happened to know today that you are dyslexic it shouldn’t change your perception but it would. But it is almost up there with that whole stigma of mental illness, almost.” Vic (Acute Adult Nurse)

Several of the participants felt that they disclosed on a need to know basis. For Andy, it was because they anticipated having difficulties due to a change of role and the requirements of the job. Dom felt that people didn’t really need to know if you were functioning well and had strategies in place. They also felt that not disclosing avoided having well-meaning but ill-informed advice being offered:

“So, I’m forever getting told I mustn’t use a particular type of font. So, when I say, actually, that’s the font that I can understand, they say, well, no, people with dyslexia find this font better. But I’m like- I’ve got dyslexia, and I don’t find that fontthat’s just something that you’ve

read.” *Dom (Adult Specialist Nurse)*

Lesley and Reese discussed disclosing before anyone else commented both in work situations and on job applications:

“I always say to them I have dyslexia so if I do spell something wrong on the whiteboard please point it out to me because sometimes I don’t realise that I’ve spelt something wrong.” Lesley (Paediatric Nurse, Education)

A common theme that came out was not wanting to be treated differently by either peers or colleagues. They were also concerned that others might think that they were receiving special treatment. Participants repeatedly said that they did not want to use dyslexia as an excuse or be seen to be using it as an excuse as well as feeling that many of the adjustments that they required would be good for all nurses:

“You know it’s not an excuse; you shouldn’t use it as an excuse. You do the best that you can do, and that is you. My godson who is 12 is already using it as an excuse, and I have told him off repeatedly for it, that you can’t do that” Vic (Acute Adult Nurse)

“I don’t think they should have made special things because of me as a dyslexic nurse, if they did them for everybody really, everybody and really standardised the way it was worked.” Andy (School Nurse)

Support for study was a common reason for disclosure, either as it was a box on the application form or for access to additional support from managers such as study time:

“The manager on the medical ward knows because I did quite a lot of study while I was in medicine.” Vic (Acute Adult Nurse)

Confidence to disclose was increased by a supportive working environment and colleagues. Participants also explained how it was easier to disclose when their colleagues saw them as a credible practitioner:

“I think when you work with people for a while and particularly when you’re working with them face-to-face, after a while they kind of just

know it's you and maybe you relax a bit more because you don't need to worry about them thinking is [...] being careless. You have to recognise that it is easier to disclose if you have credibility definitely.”
Dom (Adult Specialist Nurse)

Both Charlie and Sam felt that their working environment was a more supportive one but felt that this may be because they worked in mental health and learning disability services who were used to supporting people with ‘differences’:

“I have never felt any stigma but it has only been three years, and one would hope that I was in a supportive working environment for difficulties and differences. So no I haven't, but I know there are stigmas out there about it.” Charlie (Mental Health Nurse)

As can be seen from this section, the choice about disclosure is a complex one, but without disclosure, nurses are not fully able to access support. Support from others was also another sub-theme that emerged from the narrative, and this will now be addressed.

Support from others

Everyone discussed support they got from colleagues in practice although they were selective as to who they asked, depending on previous experience. Support included checking of reports and notes or reminders about procedures:

“I would always ask sort of senior colleagues, colleagues who work with me, to sort of proofread and tell me things. It wasn't until a little bit later in my career that I was very conscious about that.” Danni (Mental Health Specialist Nurse)

Reese and Jo also found working with others in small informal groups helpful for their learning:

“I know when I was at uni we had like a group of us that my friends would study when we had study time we sat together, and then we helped each other out on topics we may not have understood in lectures, and we worked together and talked about it which helped.” Reese (Theatre Nurse)

Several of the participants described how managers were supportive and allowed extra time, as much as reasonably possible, helping with organisational issues such as shift patterns to reduce tiredness and administrative assistance, as well as allowing access to areas to reduce distractions. Managers have also proofread documentation:

“A couple of previous bosses I've had have been brilliant because what I've done with them I said I don't need you to tell me what to do but, actually, could you just look at this before I send it off in case I have put thong in it or something like that? Because I really won't see it.” Dom (Adult Specialist Nurse)

Sam also has the opportunity to dictate reports:

“I have started to dictate some stuff as we have got admin support to do that and I have just told them thank you for letting me do that because it makes a big difference for me being able to do it and explained that it is because I am dyslexic.” Sam (Learning Disability Specialist Nurse)

Not all of the participants had disclosed to their managers citing the fact that it was not required as they were not accessing study or they had not needed to:

“My current manager doesn't know about my dyslexia. I haven't had to mention it yet because nothing really has come across and by the time that she became our manager I was going on leave. I never really had to bring it up as such. If I was going to do a course or something, then I would probably bring it up.” Jamie (Adult Community Nurse)

Overall the participants identified that dyslexia had an impact on them as a nurse both in the practice setting and engaging in continuing professional development. The nurses had developed compensatory strategies and sought the support of managers and colleagues, but this was often dependent on disclosure. Disclosure occurred on a need to know basis but patient safety was seen as paramount by all, particularly when it came to drug administration. How these themes and sub-themes related to the concept of the impact of dyslexia and nursing are presented pictorially in Figure 6 below.

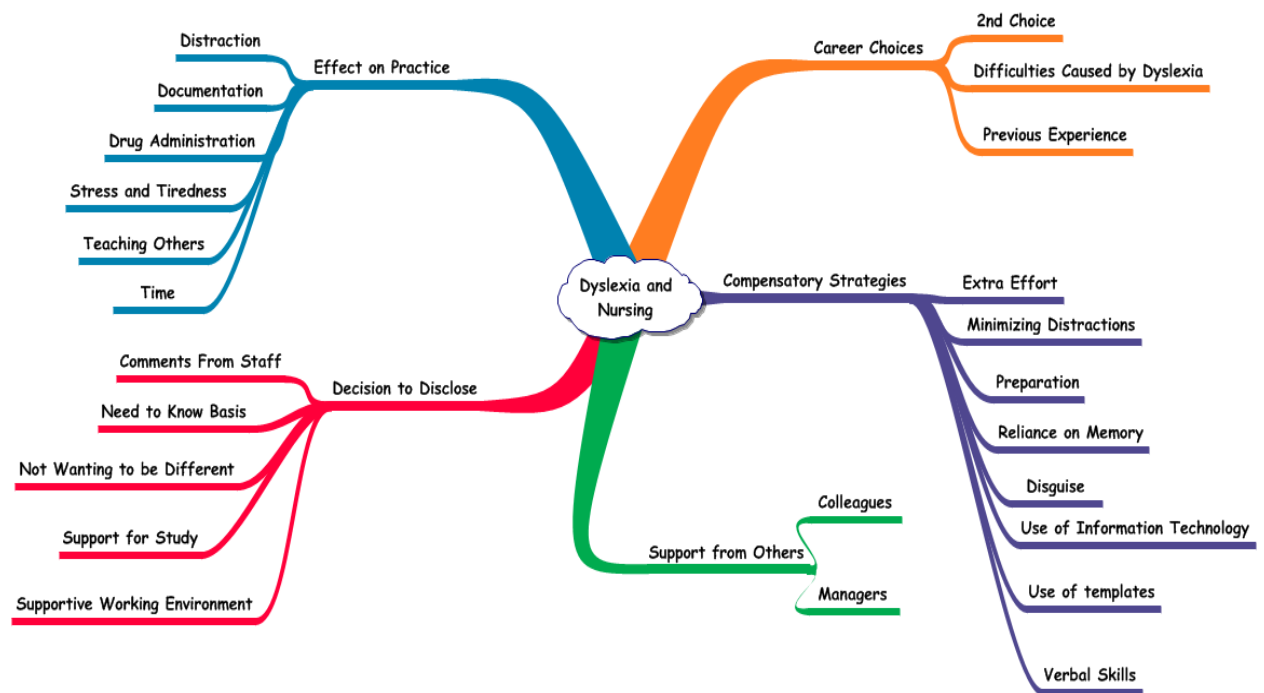


Figure 6: Dyslexia and Nursing Sub-Themes

Summary

The findings from the stories given by the nurses elicited two main themes; that of the impact of dyslexia on learning and dyslexia and nursing. The sub-themes for dyslexia and learning and dyslexia and nursing are presented visually to support any reader who prefers a visual representation as discussed in the findings above. The findings have demonstrated that while the nurses have been able to identify the impact that dyslexia has had on them throughout their lives and their nursing careers, they have in many cases been able to identify these factors and have attempted to develop compensatory strategies to mitigate for them, particularly in nursing practice. The nurses had a wide variety of academic qualifications from diploma to doctoral level, but all described how teachers and lecturers were able to either support or hinder their learning.

From the analysis of the data, it can be seen that how dyslexia affects nurses is a complex phenomenon, which is influenced by psychological, sociological and political

concepts. While the figures present the overarching themes that emerged from the narratives, each person with dyslexia is an individual with their own experiences. These individual experiences are illustrated in the quotes presented from the nurses' stories. The findings of the interviews with lecturers who have supported registered nurses with dyslexia will be presented in the next chapter, and the overall findings will be analysed in Chapter Seven.

Chapter Six: Findings from Lecturers

Introduction

During the course of the research, I felt that the inclusion of interviews with lecturers who have supported registered nurses with dyslexia would add an alternative perspective and strengthen the rigour of the research. The data presented in this chapter are the results of the narrative stories following the use of template analysis, which were agreed and commented on by the lecturers during the asynchronous online discussion forums. There were two main themes identified; the identification of dyslexia and support for students with dyslexia. Subthemes emerged from these main themes, and these will be discussed and supported using quotes from the lecturers' stories. At the end of the chapter, the findings are summarised and represented visually. Details of the main role or course that the lecturers contribute to are displayed to help give context to their comments. Further details of their professional backgrounds are detailed in Table 4 in Chapter Four.

Findings from Interviews with Lecturers

The following themes were identified following template analysis, which can be divided into two overarching themes of identification of dyslexia and support for students with dyslexia. Further subthemes also emerged, and these are presented in Table 5 below:

Themes for the Lecturers	
Identification of Dyslexia <ul style="list-style-type: none">• Recognising Dyslexia• Access to and Time to Assessment• Role of the Student• Role of the Lecturer• Impact of Diagnosis	Support for Students with Dyslexia <ul style="list-style-type: none">• Reasonable adjustments<ul style="list-style-type: none">▪ In theory▪ In practice• Role of the Lecturer• Specialist Support

Table 5: Themes from Lecturers

Identification of Dyslexia

Identification of dyslexia was a main theme that emerged from the template analysis of the lecturers' stories. All of the lecturers had supported students with dyslexia and discussed how they recognised the difficulties that this caused, both for the student and with the system. Sub-themes that emerged were the role of the lecturer, recognising dyslexia, access and time to assessment, the role of the student and impact of diagnosis.

Role of the Lecturer

The education that the lecturers had received in support of students with dyslexia varied from basic information on equality and diversity to a Masters qualification in Specific Learning Differences. The majority of lecturers had had some education on the process to follow to support students with dyslexia which included referring students for assessment, but often relied on their own experience from supporting their children with dyslexia, an interest in the topic, previous experiences or discussions with other colleagues. Those with more experience also wanted to raise awareness with their colleagues:

“The specific learning differences has been for me the biggest challenge in a lot of ways but certainly something that I am really passionate about, helping them to support and raise awareness about and based on what I am discovering I then share the information with my colleagues to try and enlighten them as well.” Billie (Disability Co-ordinator)

Shirley felt that awareness was important for early identification but not always seen as a priority:

“The dyslexia awareness sessions are completely voluntary that's why I think they're not well attended because we're all really busy and it's down to whether you make the effort to take time to go to them.” Shirley (School Nursing/Health Visiting)

In the interviews, lecturers also described how they raised the awareness of dyslexia support at the beginning of their programme of study. Both Chris and Alex had delivered sessions on dyslexia as part of the Mentor Preparation Programme, and this had led to students coming forward for assessment. In fact, Alex suggested that the number of students on the Mentorship Programme who were being identified as having dyslexia was increasing. This was also illustrated by Fiona who felt that:

“There seems to be more and more people being diagnosed with it, now whether that's because we're better at diagnostics and it's more acceptable to ask for help, or you know or to identify yourself.” Fiona (Advanced Practitioner)

The relationship that the student has with the lecturer was also identified as a key issue. Early engagement with the lecturer enabled the student to feel comfortable to disclose previously identified dyslexia. Early submission of assessed work was also identified as important as this enabled the lecturer to identify issues and suggest dyslexia assessment before the module was finished:

“We give them a task, and they have a week, two weeks to undertake the task and then to start formatively writing at level seven, so we do pick things up quite quickly. We're seeing written work within two weeks of them starting the programme.” Gerry (School Nursing/Health Visiting)

In summary, the key roles that the lecturers felt that they fulfilled were: development of a supportive relationship to enable an honest and open disclosure about dyslexia, the raising of awareness of dyslexia to students and to colleagues and be able to identify dyslexia and refer on to specialist services for diagnosis and support.

Recognising Dyslexia

Eight out of the nine lecturers discussed recognising issues with failing students either in theory or practice:

“It becomes apparent through their academic writing that there are difficulties when you are then meeting with the students for feedback and academic support to help to prepare for a second submission.” Billie (Disability Co-ordinator)

Chris identified that an increase in Health Visiting student recruitment³ a few years ago had had an impact as registered nurses moved from their usual area of practice and undertook degree level preparation for the role:

“That meant that they were often picking up students with either known or previously undiagnosed dyslexia. I found that quite a lot of those students really, really struggled in the practice setting. Talking to some of them, they had also struggled in hospital settings in their staff nurse capacity but the transition to a more independent practitioner really, really kicked their coping strategies over the edge.” Chris (Inclusivity Lead)

Seven Lecturers identified that a change in academic level might make dyslexia more obvious as previous compensatory strategies were no longer sufficient. This was a common experience that was illustrated through a comment by Billie who said:

“They [previously] managed the modular training and reportedly did not have any issues and got their registration. Been working as registered nurses for a good number of years and based on everything that is changing within nursing now want to have the opportunity to achieve a degree, and it is the academic demands, that often highlight to them that they have got challenges.” Billie (Disability Co-ordinator)

Fiona identified newly diagnosed Masters level students who had good first degrees and pondered why they had not been identified earlier in their academic careers:

“We find this quite a lot, you know in other students that we've had previously that have been diagnosed at Masters level, had a first in a first degree from other institutions and sometimes you wonder how they've

³ Department of Health (2011) *Health Visitor Implementation Plan 2011-2015*. London: Department of Health. sought to increase the number of Health Visitors by 4200 full time equivalents by 2015

managed to get to where they are you know without it being picked up sooner.” Fiona (Advanced Practitioner)

“But it seems to be quite common for post-registration nurses not to be aware that they have dyslexia and then it’s not until they come on a course and they write that first essay.” Mary (Critical Care)

Lee described recognising the differences in the way that the student presented on an online discussion forum and in academic writing which triggered the recognition of dyslexia:

“The way in which this particular student presented herself on the discussion forums was quite different from how she presented herself in her academic writing. So, on the discussion forums she was very articulate but within the actual- her academic life, she is less. Her cognitive understanding in an online environment didn’t really tie up with her cognitive understanding in an assignment.” Lee (Health Visiting)

In the interviews, many of the lecturers also mentioned students who had problems with organisational skills, both in theory and practice and structural content of their assignments and this had alerted them to possible dyslexia. For example, Shirley identified problems with a student’s assignments:

“I read them, and I was thinking that she’s got the knowledge there but she just, just the way she was presenting the information on the paper didn’t quite, you know the flow of her words and the way that she put sentences together didn’t kind of make sense.” Shirley (School Nursing/Health Visiting)

Chris identified that sometimes spelling is not particularly an issue for the nurse but other aspects such as organisation and prioritisation are. All of the lecturers discussed how students with dyslexia presented with a wider range of issues, not just spelling and reading and this was also described in the narrative from Judy:

“I guess though we are often looking for the obvious, the written aspects of dyslexia, rather than the more kind of social or organisational or you know. But difficulties with sequencing; you might have difficulties with

organising yourself, you know, but... and it's down to the same, the same thing really." Judy (Return to Practice)

Four lecturers spoke about colleagues who had dismissed students as not being very clever before a diagnosis. Interestingly Fiona said:

"I actually do wonder if there is some, you know I mean obviously these nurses are not youngsters, I just wonder if there is something that is associated with the aging process, you know as I'm getting older I'm becoming more number blind you know, so one wonders if there is something similar." Fiona (Advanced Practitioner)

Lecturers may feel that a student's difficulties with academic writing may be attributed to dyslexia, however for the student to access reasonable adjustments and specialist support, they require a 'diagnostic' assessment with an educational psychologist or specialist teacher with an Assessment Practising Certificate (GOV.UK, 2016b). Having access to that assessment was another sub-theme that arose following template analysis.

Access to and Time to Assessment

The time taken for assessment was reported to vary (but generally took a number of weeks). However, students on a CPD module may well not be assessed in time for reasonable adjustments to be in place to support them as the module would usually be one term long. A number of lecturers expressed concern that students had to continue so long without specialist support or reasonable adjustments and may well be failing. Students also needed to be proactive to ensure that they requested an assessment early. This was a problem if the student is unaware of the need for assessment:

"If they're not assessed quick enough, they miss out on getting funding for extra materials that they might need and they also can't access all of the support services in the university. Student support do their very best, but I think there's some technical difficulties." Shirley (School Nursing/Health Visiting)

More specifically, the time of year seemed to affect the ability to access assessment with the beginning of the academic year being particularly problematic due to large intakes of new students requiring assessment:

“It depends on what time of year as to how long it takes to get the assessment completed. Well actually there are lots of factors, it is what time of year, obviously this time of year from fresher's week up until Christmas is pretty dire. The other big factor is how proactive the students are.” Chris (Inclusivity Lead)

Chris also recognised that cost might have an effect on the uptake for assessment for dyslexia which they were now offering for free at their university:

“We've actually stopped charging them now because we saw that as being a barrier. Some universities in the UK charge them the whole lot so the £400 and some, I say like us don't.” Chris (Inclusivity Lead)

While identifying that the system had an impact on the formal identification of dyslexia, the lecturers also discussed the responsibility of the student in this process which is reviewed in the next section.

Role of the Student

Eight out of the nine lecturers interviewed also discussed the role of the student concerning disclosure of dyslexia. As identified in the literature review and the nurses' stories, disclosure is a complex and individual experience, and lecturers expressed that an increasing number of students were identifying that they were dyslexic. For example, Alex stated that they had an increased number of students on their Mentor Preparation Programme disclosing that they had dyslexia.

“I am seeing an increasing number, actually, of students on the mentors and assessors programme disclosing that they have dyslexia.” Alex (Disability Tutor)

However, it was interesting to note that many of the lecturers felt that those who were younger and been diagnosed in childhood were more open about their dyslexia, even if they then did not want to access any additional support. Billie illustrated this in their interview when they stated:

“For the younger population or those that have managed to access support recently, they are much more receptive and much more willing to disclose and try to access relevant support than those that have tried to keep their disability hidden.” Billie (Disability Co-ordinator)

In contrast, some lecturers suggested that some students felt that their dyslexia was a weakness, which may be related to stigma as identified in the literature review and the nurses’ narratives. They thought that students felt that they should either be able to manage without support or that if disclosed, it would affect their position within the practice setting. Several also described students not wanting to disclose to practice assessors even if they had disclosed to the university.

“I think it’s this theory of them thinking that somebody will come and say, well, we’re onto you now. We know that you’re not strong enough or not good enough or actually, that job that you had as a band seven, when you go back we’re actually going to slot you in again as a band 5. So there is a certain fear, I think, or trepidation perhaps is a better way to put it of registrants coming.” Alex (Disability Tutor)

Lecturers recognised that this lack of disclosure had an effect on the provision available for students and whether reasonable adjustments could be applied, particularly during the assessment process. Lecturers also identified the impact that diagnosis had on qualified nurses, and this will be addressed in the next section.

Impact of diagnosis

All of the lecturers discussed the emotional impact of a dyslexia diagnosis, something that was also discussed by the nurses within this study and identified within the literature review:

“One of them was relieved because she thought she was, but she’s never really faced it, and she said she’d tried to hide it for years and years. The other one was absolutely devastated to the point where she actually went off sick for a while.” Fiona (Advance Practitioner)

“She found that quite an emotional process, very upsetting and you know I think there’s all those emotions that are attached to I suppose her own childhood experiences in education and then all the difficulties she’s had in her sense of failure.” Shirley (School Nursing/Health Visiting)

Other lecturers reported that students had felt that the diagnosis had helped them make sense of their experiences:

“Most people kind of say, Oh, I’ve always known there was a problem, but I have never done anything about it,’ or, ‘I’ve always felt like I struggled at school, but I didn’t want anybody to think I was thick or stupid or whatever.” Judy (Return to Practice)

“And I’ve also noticed that a lot of them, when they’ve had this identified, time and time again people have said to me, oh that so makes sense to me now, and I’m so glad I know that now.” Mary (Critical Care)

As identified within the literature review and by the nurses within this study, some lecturers felt that the nurses were worried about discrimination and stigma:

“Often they don’t want to tell anybody anything because they feel that they then might be disadvantaged or discriminated against. It’s an emotional time for them as well because then I suppose they can go through a sense of grief and loss but equally for some of them it is a sense of relief to realise that actually there might be a way to help them manage the situation.” Billie (Disability Co-ordinator)

An overall summary of the theme identification of dyslexia is presented in Figure 7.

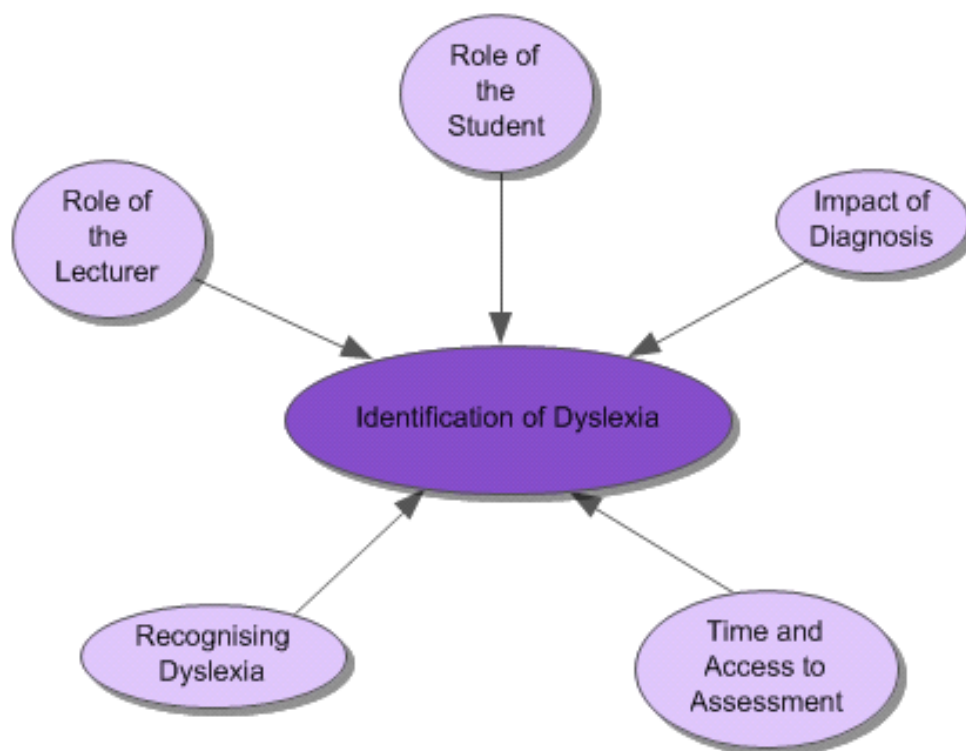


Figure 7: Identification of Dyslexia Sub-themes

Support for Students with Dyslexia

Support for students with dyslexia was the second main theme identified during template analysis. The analysis identified that there were several sub-themes that underpinned this main theme, which included: the role of the lecturer, reasonable adjustment (in both theory and practice) and specialist support, and these are now presented below.

Role of the Lecturer

Seven out of nine lecturers identified that supporting students required extra time or effort to accommodate reasonable adjustments. Exam arrangements were particularly seen as problematic both in terms of extra time and separate rooms. Several lecturers discussed the requirement to make PowerPoints available earlier, whereas Gerry felt that they had to work a little harder to make their sessions more student led. Mary also

discussed how they had changed their teaching to accommodate students with dyslexia and how this had taken them out of their comfort zone.

“Because it feels like, the traditional way of teaching it doesn’t necessarily work, if you have dyslexia. And I’ve learned a couple of tricks over the years it’s hard to learn new tricks.” Mary (Critical Care)

Seven lecturers discussed compensatory strategies that the students might have. They generally recognised that students had developed strategies, particularly in practice.

Lee and Mary gave examples of students who were aware of their strategies and had been very open about how they would need to use them. Billie and Alex both discussed helping the student to identify their strategies and how they could be applied to the academic setting:

“Sometimes it’s about helping them unpick what strategies they have already identified and have been working for them and how they can then be applied within a new context.” Billie (Disability Co-ordinator)

Lecturers were acutely aware that patient safety is paramount. The majority of lecturers discussed how the registered nurses with dyslexia were good practitioners but also mentioned:

“Colleagues who just believe that people who have got disabilities, dyslexia, shouldn’t necessarily be nurses because they are going to be unsafe practitioners who are going to compromise patient safety.” Mary (Critical Care)

Courses such as the Specialist Public Health Qualification lead to registration with the Nursing and Midwifery Council and lecturers were aware of their accountability as registrants:

“We have to sign them off, it is an NMC qualification and am I happy putting my registration at risk, you know supporting them becoming a health visitor and I am very mindful of that with students.” Shirley (School Nursing/Health Visiting).

Many of the lecturers had no specific education in dyslexia. However, they were using experiences gained from previous situations, other staff or that they had used with their own children to support learners:

“You learn on the hop, as you are going, and hope that with the positive outcome, that will reinforce what is potentially going to work and perhaps what is not.” Billie (Disability Co-ordinator)

“I had a random conversation with a friend who is a secondary school teacher and she was saying that they use blue whiteboard pens on the whiteboard and that facilitates dyslexia in terms of they should be able to manage to read that better in that blue ink on PowerPoint with the cream background is also better for people.” Gerry (School Nursing/Health Visiting)

Reasonable adjustments

Reasonable adjustments are suggested by the educational psychologist or specialist assessor following the dyslexia assessment. However, these are long challenging documents for academic staff to decipher and Billie, Chris and Alex were responsible for ensuring that the reasonable adjustments recommended were applied to nursing. For others, the purpose and role of the recommendations for reasonable adjustments were not always clear, as Judy described when she was given an assessment outcome document by a student:

“She brought the report to me; it was rather lengthy, you had to read it and pick out, there wasn't anything specific, it didn't say you need to be doing this.” Judy (Return to Practice)

While reasonable adjustments were often offered, they were not always accepted by the students:

“The law requires us to be anticipatory but in order to anticipate you've got to have had some sort of experiential insight and so there's a very fine line between anticipation and prejudice. I'm aware that sometimes I

see a student come in and I really think you might benefit from support but if they don't want it, okay, and, yes, nine times out of ten they do come back at some point and say I think it's all gone a bit wrong." Alex (Disability Tutor)

Lifelong learning for nurses occurs both in academic and practice setting, and therefore reasonable adjustments need to occur for those with dyslexia in both areas. This will be discussed in the next two sections.

Reasonable adjustments in Theory

All of the lecturers discussed adjustments in theory, particularly extra time for examinations and written assessment and the use of scribes in lectures, with Judy saying:

"They sit at the back of the lecture theatre and scribe. They are not sat next to the person, just sat at the back of the room. It could be for anybody, so I kind of like that." Judy (Return to Practice).

Extra time for Observed Structured Clinical Examinations (OSCE's) was given in the programmes which Mary and Fiona were involved in although both felt that in their experience students had not required that extra time. However, Mary made an interesting point about extra time when they said:

"One of the things I remember our specialist principle lecturer saying is that it's not always about quantity of time; it's about quality of time. So you can have a two-hour exam, in practice, and a skills-based assessment, and you can add in more time, but if you're rushing through points, or you're asking questions in a way the student hasn't absorbed them, in a way more time doesn't really help them. It would be about asking a question, waiting, allowing time to absorb that question." Mary (Critical Care)

Eight out of nine lecturers discussed the use of information technology in supporting students with dyslexia. All were able to discuss a variety of software that students could access such as text to speech, reading and writing software and mind mapping tools.

Mary, Shirley and Lee described the use of audio recording lessons, which they did not see as a problem, although Mary reminded students to ensure that people were aware of recording if sensitive issues were being raised.

“But sometimes I need to remind the students, or just remind myself as well, if sensitive things are being discussed or, do you know what I mean, just around kind of recording of information, that if people are talking freely, or there’s quite sensitive issues or whatever, that the people know it’s being recorded.” Mary (Critical Care)

Alex recognised the need to prepare certain programmes such as Dragon⁴ and that assistive technology required training for the student to be able to use it; just having access is not enough and this was an issue also raised by nurses within this study.

One lecturer had developed a policy for an alternative assessment approach which had been accepted by the university:

“Following submission of their dissertation we can offer them something that allows them to progress along their pathway by using a style of assessment that possible meets their needs better. So what we do is we mark the paper submission and then we Viva on top of that with the proviso that the mark can't possibly go down but could go up.” Chris (Inclusivity Lead).

Seven out of nine Lecturers described inclusive approaches to education. Mary discussed how they had included a variety of assessment methods within the modules to "try to do something for everybody". Billie, Mary, Gerry, Fiona, Chris and Lee specifically mentioned ensuring that there was a variety within their teaching activities to enable students with different 'learning styles' to access them. This was described by Fiona:

⁴ Dragon Naturally Speaking is a speech to text software programme that recognises the user’s voice once it has been trained to do so.

“You know there is a whole range of different learning styles and so there's a whole range of different materials, so you know there are videos to watch, there are things to read, you know there's things to do so you know it compensates for every different learning style.” Fiona (Advance Practitioner).

This inclusive way of working extended to access to support services and assistive technologies at some universities. Judy stated that student support services were available to all regardless of an identified learning difference/disability and Billie and Alex noted that all university computers had assistive technology on them.

“The computers are available to students within the university, and all have the same supportive software, assistive technology that students with dyslexia might use like Read and Write Gold, Inspiration, those kinds of things, so the whole student population can have access there.” Billie (Disability Co-ordinator)

Reasonable adjustments in marking academic work were seen to cause some difficulties for some. Gerry discussed a situation where she felt that a colleague had overcompensated when they marked a student who had dyslexia:

“I think that my colleague had made allowances for that when she had done the marking. She was so far from the mark that it was just, you know, in all fairness to the students who had passed, you couldn't have passed it because it is just not fair.” Gerry (School Nursing/Health Visiting)

Reasonable adjustments in practice

Most of the lecturers taught post-registration students who had at least some practice based aspects to their programme and therefore reasonable adjustments were required in practice as well as theory.

Safety in practice was a key concern regarding both reasonable adjustments and assessment:

“If a student has a scribe or what have you in the university setting, they wouldn’t necessarily be appropriate in practice, or certainly not for the majority of practice and reasonable adjustments such as additional time to complete certain things in university settings. Obviously, it’s not safe for us to apply those in the practice setting, such as additional time to resus⁵ somebody is not going to fit.” Alex (Disability Tutor).

Lecturers noted a variety of attitudes to nurses with dyslexia in practice particularly about documentation, in relation to accuracy and the ability to stand up to external scrutiny, as well as drug administration:

“One of the things that seems to be quite common is staff assuming that students who have dyslexia will also have dyscalculia or the traits of dyscalculia and that tends to worry people more than the reading and writing elements of dyslexia. It tends to be oh, how are we possibly going to manage this with the drug calculations and things like that? So there are misconceptions.” Alex (Disability Tutor)

The mentor in practice appears key to ensuring that reasonable adjustments are followed, with Alex discussing that they felt some mentors either overcompensated for a student with dyslexia or did not allow any adjustments. Involving others in reasonable adjustments in practice was also discussed and linked to issues of disclosure by the student:

“Particularly with the health visiting; the added challenge there was that they are actually employees and so I sometimes got involved with managers as well and discussions about what adjustments I thought that they needed to make in a workplace that were perhaps over and above ones that I would normally say for a student.” Chris (Inclusivity Lead)

⁵ Resus is an abbreviation for cardiopulmonary resuscitation

As can be seen from the narratives presented, reasonable adjustments appear to vary from one university to another, along with access to services and specialist support. This will be discussed further in the next sub-theme.

Specialist support

All nine lecturers discussed access to specialist student support. For example, Judy raised difficulties with access:

“The post-reg students aren’t supernumerary and have got limited time, although they may or may not be on shift work. But those that are doing nine to five, it is definitely more difficult. I mean a lot of them do have supportive employers. But obviously, they have still got lives to lead as well, haven’t they?” Judy (Return to Practice)

Lecturers discussed how specialist student support would help students structure and proofread work. Several lecturers could identify students who did not want to access student support, as they did not feel that they needed it, as well as students that would have benefited from it but were unable to access specialist support due to the time taken for assessment.

Funding for assessment and support appears to be variable both across universities and within the HEI. Billie felt that funding had been reduced recently with Mary identifying that students were able to access specialist support for initial modules, but not later on in their programme, with their dissertation for example. Chris recognised that cost might have an effect on the uptake of assessment and therefore this is now offered free, and Gerry identified that postgraduate students were not entitled to funding, as they were not full-time students:

“At postgraduate level it's different, everything within the UK you know within the university is guided towards full-time undergraduate teaching,

postgraduates you know they're just not treated in the same way and you know short course CPD etc. Most of them are already in full-time jobs disability act would state that the funding would have to come from the primary place of work.” Gerry (School Nursing/Health Visiting).

An overall summary of the theme support for students with dyslexia is presented in

Figure 8 below:

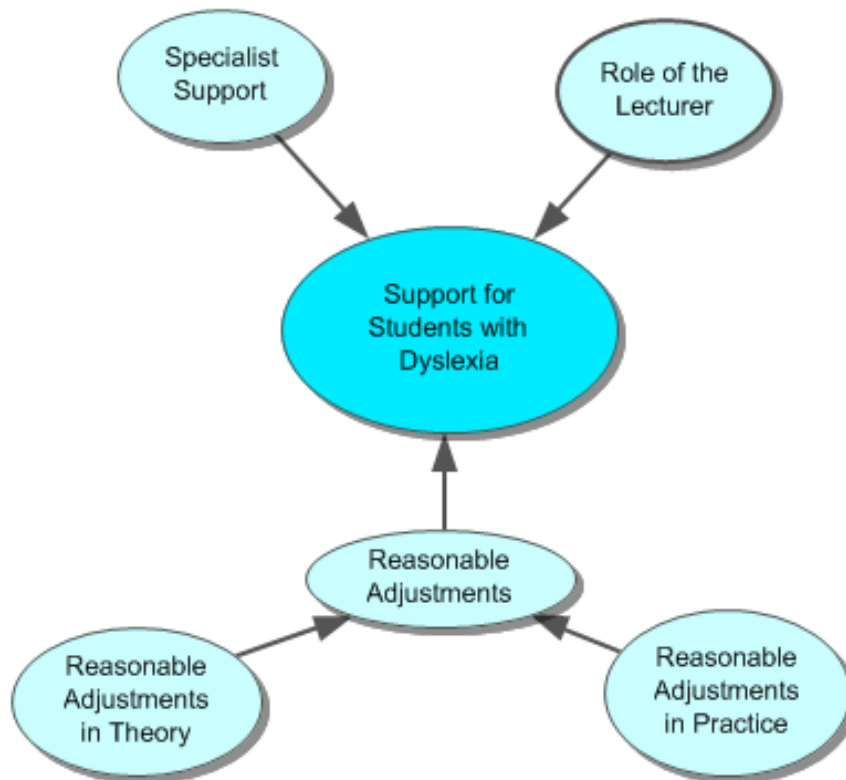


Figure 8: Support for Students with Dyslexia Sub-Themes

Summary

This chapter has discussed the themes resulting from the interviews with the lecturers which were developed from template analysis and then discussed using the asynchronous online discussion forums. Verbatim quotes were included to increase the credibility of the research. The findings in this chapter have demonstrated that the lecturer is often the key person who may recognise signs of dyslexia in the student; however, this is dependent on their experience and training. Reasonable adjustments are available to the registered nurses, but this is dependent on disclosure and for those

who have not been formally diagnosed, early assessment. The lecturers were able to recognise the psychological impact of dyslexia on the registered nurses, especially those with a new or late diagnosis and that the relationship with the lecturer was very important to ensure adequate support. However, reasonable adjustments did impact on the lecturers both in time and resources. Some of these themes show commonality with those of the qualified nurses, and this is presented in Figure 9 below:



Figure 9: Common Themes from Qualified Nurses and Lecturers

The next chapter will synthesise the findings from both the lecturers and the nurses, linking the findings to current knowledge and research in the field.

Chapter Seven: Synthesis of Findings

Introduction

At the start of this research I had only planned to interview qualified nurses with dyslexia. However, it became apparent that to ensure that I could understand how to effectively support these nurses, the perspective of lecturers who had taught nurses with dyslexia would be beneficial. This chapter will synthesise the findings from the interviews undertaken with both the registered nurses and the lecturers, drawing on relevant educational, sociological and psychological theories. A new model of lifelong learning as a nurse with dyslexia will be introduced. This model will be used to address the research questions, as well as to develop a fuller understanding of the impact that dyslexia might have on qualified nurses throughout their lives and careers. The chapter will conclude with an analysis of how rigour has been maintained within the research and summarise the discussion, linking to the conclusions and recommendations.

Addressing the Research Questions

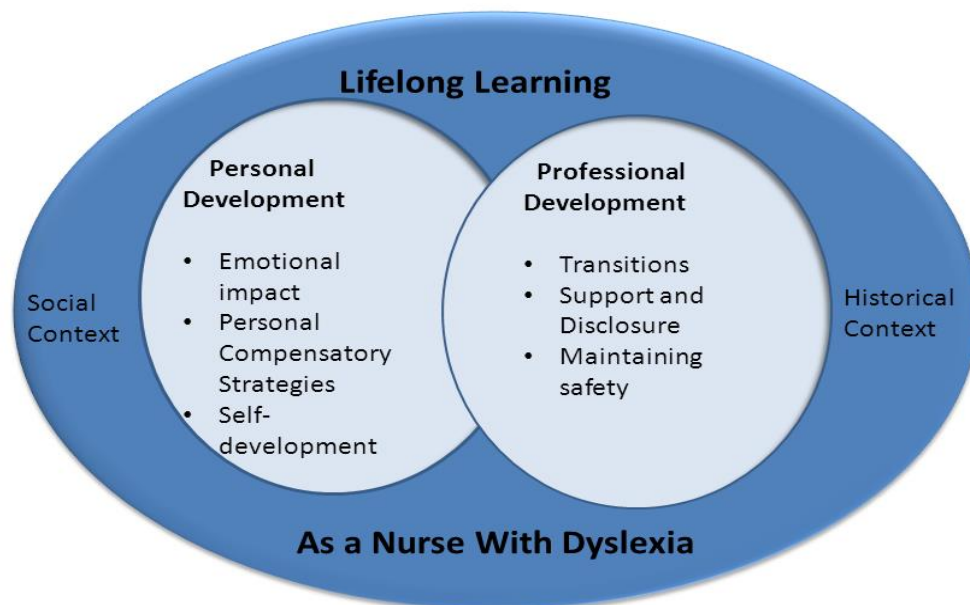
Following the literature review, the research questions were revised, and narrative interviews were conducted with both qualified nurses and lecturers to answer them. The research questions that were investigated were:

- How has dyslexia affected qualified nurses' lives and development strategies over their careers?
- How has dyslexia affected nurses' engagement with learning?
- What strategies are effective in supporting qualified nurses with dyslexia?

The finding from both the nurses and the lecturers moved those research questions on to develop a fuller understanding of the impact of dyslexia on the personal and

professional development of qualified nurses, as well as the strategies that are effective in supporting them. This demonstrated a complex interconnection between the effects of dyslexia on registered nurses, their compensatory strategies, how they engaged with learning and what support was effective for them. As a result of this, a new model was developed to structure the discussion, which is presented in Figure 10, rather than answering the research questions separately.

Figure 10: Model of Effects of Dyslexia on Nurses



Initially, lifecourse theory (Elder, 1998, Bengtson et al., 2005) informed my thinking, as discussed in the methodology chapter. However, it soon became obvious that while many of the findings did fit into this theory, others did not and to present the discussion using the five concepts of lifecourse theory would be limiting. Lifecourse theory, therefore, became one of the theories that will be used to support the discussion rather

than to structure the synthesis. Lifecourse theory recognises the historical time and place that the nurses have come from and the social circumstances that have impacted on their personal and professional development in the context of lifelong learning and this was integrated into the model.

Personal Development

Emotional Impact of Dyslexia

The emotional impact of dyslexia was recognised by the nurses and lecturers; with both groups discussing the effect of diagnosis and how it had impacted on the nurses' sense of self. While for many the diagnosis came later in life, it was often not a surprise, as all had identified that they had had difficulties in school. A late diagnosis did generate thoughts of what might have been if they had been identified as having dyslexia earlier. Previous childhood experiences such as negative comments from teachers also added a negative perception of their academic self-concept and frustration when comparing themselves to others, mirroring previous research with trainee teachers (Glazzard and Dale, 2013). Lawrence (2006) suggests that self-concept is a product of the person's characteristics and their evaluation of them; their self-image and what they deem to be their ideal self. How the person evaluates the difference between their self-image and ideal image is identified as their self-esteem (Lawrence, 2006). Narratives from the nurses identified poor self-esteem for many, particularly in childhood, when comparing themselves to others. This finding is supported by research by McNulty (2003) who demonstrated that self-esteem was negatively affected by dyslexia, even if they had been successful in adulthood.

Research has shown that formal identification of dyslexia can improve a person's self-concept as they are able to differentiate between difficulties attributed to their SpLD and intelligence (Glazzard, 2010). Marsh and Martin (2011) theorised that there is a reciprocal effect of increasing academic achievement and academic self-concept. For those nurses in my study who had achieved academically such as Dom, their academic self-concept was higher, although this still appeared to be rather precarious, especially when questioned by others such as lecturers and educational psychologists, as in the case of Lesley. Higher academic self-concept has also been found to increase academic achievement (Marsh and Martin, 2011). This is a complex phenomenon and is influenced by a number of psychological and sociological concepts. For some of the nurses who had experienced failure at higher levels of academic writing or in practice such as Kelly, there was a degree of helplessness, where they felt that they could not progress any further because of their dyslexia and that there was nothing that they could do to improve the situation. For others, difficulties related to dyslexia were seen as a challenge that could be overcome. However, the interviews showed that there were different perspectives on the impact of dyslexia on their learning. Why the nurses' outlook on learning differed was unclear. However, the theory of locus of control offers a potential insight into this. This theory suggests that people with an internal locus of control attribute their success to factors that they could control such as effort, whereas those with an external locus of control felt that success or failure was more related to external factors such as luck or the level of the task to be performed (Corno and Anderman, 2016). Frederickson and Jacobs (2001), in a small-scale study, found that children with an internal locus of control, where they felt that success was based on their own hard work tended to have

a higher level of academic self-concept than those who felt that achievement was out of their control. Humphrey and Mullins (2002) identified that children with dyslexia are more likely to attribute academic success to external forces such as good teachers than their own achievement and amount of work effort. However, academic failure was attributed internally, with factors such as lack of intelligence or lack of effort cited. This was not the case for all the nurses in this study, for example Sam, and Dweck (2000) suggested that this may be because those who were mastery-orientated rather than focused on helplessness remained focused on achievement despite difficulties. For those with a mastery orientation, difficulties were seen as a normal part of life and challenges welcomed (Dweck, 2000). Hjemdal et al. (2012) identified that high levels of resilience were a protective factor in the development of helplessness. It could be argued that to have met the requirements to become a registered nurse the nurse participants needed to have shown resilience and self-development, as they all had overcome difficulties in education. Many of the nurses, including Charlie and Lesley, had also overcome personal and social challenges as well. This perseverance or tenacity has been shown to be essential for longer-term success in education and employment for individuals with learning difficulties (Goldberg et al., 2003) and ultimately engagement in lifelong learning.

The role of parents and family were very important to many of the nurses, particularly Dom, Sam, and Jamie, especially during their childhood and adolescence. Parents provided emotional support as well as affirming their abilities and positive characteristics and encouraging engagement in learning. Parental interest in education has been shown to have a positive effect on the educational attainment of people with

dyslexia (Flouri, 2006), as well as their self-esteem throughout life (Nalavany and Carawan, 2012, Carawan et al., 2015, Nalavany et al., 2015). For nurses in my study without this support such as Charlie, it was often a teacher who was singled out as the person who encouraged them to maintain a positive attitude to learning and to continue on in education and nursing. This is in keeping with the longitudinal research by Goldberg et al. (2003) where effective use of social support systems was one of the characteristics attributed to the success of individuals with learning difficulties. The role of personal and professional support will be discussed further, later in this chapter.

Personal Compensatory Strategies

The nurses within my study identified that they had to be organised and spent a great deal of time in preparation for activities, although organisational skills have been identified as a problem for those with dyslexia (Moody, 2009, Brunswick, 2012) and were identified as an issue by the lecturers. A study by Leather et al. (2011) identified that adults with dyslexia who had developed higher level executive functioning reported higher levels of job satisfaction, self-efficacy and perceived personal success, although they did not achieve higher levels of pay or promotion.

Disguise and avoidance were another set of strategies that were identified by the nurses within my study, and this was also identified in a study of teenagers with dyslexia by Alexander-Passe (2006). In my study, many of the nurses' interviews including Sam, Kelly and Pat, identified that they would avoid reading out loud and would either use alternative words if they could not spell or write in an untidy manner to disguise the spelling. There could be many reasons for this behaviour, not least the stigma associated with dyslexia (Evans, 2015) and other psychological and emotional effects (Armstrong

and Humphrey, 2009, Macdonald, 2010). While the strategies could have a personal protective effect (Armstrong and Humphrey, 2009) they also could have professional consequences which are discussed in the section in this chapter on safety.

Many of the nurses in my study including Adi also discussed how they used their memory to compensate for difficulties that they encountered, for example, spending hours memorising written work so that it did not have to be read in public. For many people with dyslexia, whilst their long-term memory is often good (Kibby and Cohen, 2008), working memory has been identified as a potential deficit (Beneventi et al., 2010, Callens et al., 2012). However, visual memory has been identified as a potential compensatory mechanism (Callens et al., 2012, Bacon and Handley, 2014). Working memory is the process by which information is stored in the short-term to enable it to enter the long-term memory, as well as retrieving information from the long-term memory (McLoughlin and Leather, 2012). Working memory has been found to be impaired by stress (Qin et al., 2009) and many of the nurses identified that their dyslexia symptoms were worse when they were tired. The nurses in my study attempted to compensate for this as much as possible by seeking additional support or in the case of Sam, changing working patterns as discussed later in this chapter.

The extra effort required both in theory and practice was recognised by the nurses and lecturers within my study. It took extra time to complete documentation and to learn new skills, words, and templates by which to structure their work. The ability to recognise how and when to use strategies for learning (metacognition) is often not automatic for those with dyslexia (McLoughlin and Leather, 2012) and therefore it will

take time and extra effort to engage in activities that others may not have to think about. This will increase the level of tiredness and stress that nurses with dyslexia may experience which has been shown in my study to increase the difficulties experienced from dyslexia and will reduce the ability to engage in learning activities.

Many of the participants were drawn to nursing because of the practical nature of the career, some before the nursing became a graduate profession. The nurses in my study identified that they were very practical and enjoyed learning in this way. Many including Vic and Dom also discussed how they preferred more visual methods of learning. It can be argued that over time, people will identify ways of learning that are effective and that they will continue to use these strategies forming a preferred learning style (Mortimore, 2008). Several studies have sought to identify the preferred learning styles of nursing students (Rassool and Rawaf, 2008, Fleming et al., 2011, Ponto et al., 2014) as well as students with dyslexia (Exley, 2003), although the methodology and findings of this study have been criticised (Mortimore, 2005). It has been argued that the use of learning styles is controversial as the tools used are in the main not valid or reliable (Coffield et al., 2004a, Coffield et al., 2004b). However, the process of self-reflection and interest in the students learning can be beneficial (Mortimore, 2008). What appears to be important is identifying what methods work best for the learner (Reid and Strnadova, 2008). It must also be recognised that the use of the term learning styles is very much common practice in nursing literature (Rassool and Rawaf, 2008, Fleming et al., 2011, Ponto et al., 2014, Gopee, 2015) and was used extensively by the participants within their narratives. The term learning styles is, therefore, used to describe the participants preferred approach to learning. The nurses within my study identified that they learnt

best when they were engaged in the learning either at a practical level or when it was applied to their area of practice, and this is supported by the literature (Kirby et al., 2008). Post-registration CPD is often very applied to the nurse's area of interest and practice, and this will encourage nurses to invest the time and effort required for deep learning (Roberts, 2010). A comparative study of dyslexic and non-dyslexic students at universities in Canada demonstrated that the dyslexic students were more likely to use deep approaches to learning (Kirby et al., 2008). This was also seen in my study with the nurses preferring to actively engage with the learning process which helped them to learn more effectively and reduce the challenges that dyslexia posed for them.

There were, however, conflicts and challenges in how participants demonstrated their learning and personal compensatory strategies. The nurses within my study identified that they had developed their verbal skills but these did not match their ability to write. Danni and Jamie described how they were able to talk through complex issues and would rather do this than write an email or letter. This was also identified by the lecturers and is commonly one of the earliest signs of dyslexia (Mather and Wendling, 2012). Verbal skills are important in nursing, and all of the nurses sought to use these skills to teach others. The teaching of others could be viewed as a way of enhancing self-esteem (Heinz, 2015), as the nurse feels valued for their knowledge and experience (Alexander-Passe, 2015). The nurses also felt that they had developed particular skills in teaching, as they had different ways of approaching learning that they had developed over the years. This is mirrored in studies of teachers with dyslexia (Burns and Bell, 2010, Burns et al., 2013). They felt that they had higher levels of empathy and caring which

may be related to their previous experiences and is a positive trait cited by other authors (McLoughlin and Leather, 2012, Glazzard and Dale, 2013).

Self-Development

The narratives of the nurses demonstrated a strong sense of wanting to prove themselves both to themselves and to others, particularly to those who had not seen their potential in earlier in life. Many of the nurses including Jo and Jamie had engaged in learning activities for self-development or as a challenge. Self-determination theory suggests that people need to feel autonomous, competent and related to others around them and that they will pursue goals to achieve these states (Deci and Ryan, 2000). For those nurses who had been able to achieve their goals and progress their career, their motivation to continue with education was high. However, for others, particularly Kelly and Reese, continued failure, either academically or professionally reduced this motivation.

In terms of understanding what factors affected the nurses' self-development, the nurses interviewed who demonstrated an external locus of control, where they felt that they had little control over their academic and professional progress, were less likely to engage in self-development. A study by Ponto et al. (2014) identified that nurses were more likely to have an external locus of control than medical or physiotherapy students, and it was suggested that this was because nurses worked more in teams and had their work reviewed by others in a hierarchical system, although the same could be argued for medicine. A previous doctoral thesis by Ponto investigated how the locus of control affected student nurses' level of satisfaction, autonomy, and control. In this it was identified that while nursing students were more likely to have an external locus of

control, this became more internal as they progressed through their diploma programme (Ponto, 2004). This demonstrates that locus of control is dynamic and that successful engagement in academic study can encourage nurses to feel more in control of their own learning and development and continue to engage in lifelong learning.

Personal development cannot be viewed in isolation, as there are many factors that can influence the individual. Bronfenbrenner (1977) proposed a model of human development in which the influences on the individual include those immediately around them, the wider family and institutional settings that they might be involved in, as well as the social, cultural and political contexts. For the participants within my study, these influences cannot be ignored. The different ages, genders, and backgrounds of the participants may have influenced the cultural and political influences on them as they developed as learners and how they and their families valued education (Bronfenbrenner, 1976, Biesta, 2006). How dyslexia was viewed would also be influenced by these factors (Pollak, 2002). Drawing on lifecourse theory this relates both to linked lives (Elder and Pellerin, 1998) but also agency.

Agency can be seen as the ability for a person to make choices and have free will (Ecclestone et al., 2009). It can be argued that adults have the ability to make free choices about how they engage in learning and progress their careers, however, these may be limited by sociological, political and cultural influences (Biesta et al., 2011), as well as psychological factors discussed previously. This is also in keeping with Alheit (2009) Biographical Learning Theory where individual learning is experienced at the micro level, and societal factors influence the macro level of learning. For the nurses in

the study, some were able to overcome many of these influencing factors to progress, whereas others found this more difficult. In relation to the research questions being investigated within this study, it is important to recognise the emotional impact that dyslexia can have on the personal development of the nurse and how emotional factors can influence whether the nurse is willing to engage with further learning, especially if there is a risk of failure or they feel that they have no control of their own success. Positive experiences of learning and achievement of success, as well as the positive use of personal compensatory strategies, can motivate nurses to engage in further learning which will help them develop professionally.

Professional Development

Transitions

As discussed in the introduction to this thesis, nursing as a profession is changing, with increased academic requirements at entry level and increasing throughput and complexity of service users (Maslin-Prothero, 2013). There has also been pressure following reports of bad practice including patient deaths, resulting in external reviews (Willis Commission, 2012, Francis, 2013). This change increases the requirement for all nurses to maintain their CPD (Brekelmans et al., 2013) but this can prove a challenge for those with dyslexia. Many of the nurses chose courses at secondary school which required less academic writing to reflect their strengths, or attended school when dyslexia may not have been as widely acknowledged (Jamieson and Morgan, 2008). The findings of this study identified that the increasing academic level could cause difficulties and might even lead to recognition of dyslexia and eventual diagnosis.

The nurse participants in my study, including Vic and Jamie, identified that they found changes to the style of academic assessments, as well as changes in the academic level of study challenging and often their compensatory strategies were initially insufficient to meet these demands. It took them time to learn how to structure an assignment in a certain way, and once they had done this, they used this as a template for future work. This is in contrast to current educational thinking where a variety of assignment types are used to cater for different student preferences and to enhance student engagement (Fry et al., 2014). This may, in fact, be detrimental to learners with dyslexia, as the structure is often a problem in academic writing (Tops et al., 2013). Students could actually spend more time trying to navigate how to structure the assignment than on the actual content required. For qualified nurses who engage in CPD units with a variety of universities with different academic requirements, this difficulty with navigating the structure of an assignment may be magnified.

The use of templates in the form of exemplars or main headings was also a key theme in practice, with the nurses developing their own way of structuring documentation. However, successfully managing this way of working was identified as requiring a degree of stability and the nurses in my study moved to areas that were more supportive and where the documentation was more manageable. This could be in the form of electronic health care records or areas such as intensive care where the documentation is set out in a structured manner. A change in role or job is likely to cause difficulties initially and therefore support may be required initially to adapt their compensatory strategies to the new situation (Reid et al., 2008) and this will be discussed further in the next section.

Weedon and Riddell (2010) recognised that students with a disability such as dyslexia

may have more transitions within higher education and may find these more difficult due to complex psychological issues and past educational experiences. However, Alheit (2012) suggests that transitions are an opportunity for learning depending on how important the change is seen to be and how the learner is able to reflect on it. Compensatory strategies are likely to be developed as part of the lifelong learning process along with other skills, although the nurses within my study were not always overtly aware of this development.

Support and Disclosure

Many people are involved in the professional development of a nurse, but for nurses with dyslexia, professional and educational support was seen as particularly important to assist them in areas that they found more difficult. To be able to access additional resources, dyslexia needs to be recognised and disclosure has to occur. The lecturers in the study identified that while some nurses were aware that they had dyslexia, support was sometimes only requested when the student was failing. Unsurprisingly, Goldberg et al. (2003) found that students with dyslexia were more successful when they actively sought out support and accepted it when it was offered.

Disclosure was an issue identified within the literature review and in this study. Nurses had a variety of reasons for choosing whether to disclose including a need to know and a supportive work environment. The nurses who had developed compensatory strategies, self-confidence and achieved successfully in their nursing career were more likely to disclose. McLoughlin and Leather (2012) suggest that success at work depends on many factors including the person being aware of their skills, feeling supported and being valued for their skills and knowledge. Dyslexia can be seen as a hidden disability

(Nalavany et al., 2015) and therefore it is possible for nurses not to disclose. My study identified that nurses can achieve very successful careers without either being aware of or disclosing their dyslexia, particularly in the case of Lesley. Disclosure poses the risk of a change in social identity (Riddell and Weedon, 2014, Evans, 2015) and for most of the nurses in the study, this was not something that they were willing to chance until they had established themselves within the nursing team. This was also something that was identified by the lecturers who found that disclosure was much more likely to occur once they had developed a relationship with the student. Both nurses and lecturers were aware that there is a stigma attached to the label of dyslexia (Riddick, 2000, Evans, 2015), for example in relation to safe clinical practice, and stigma is likely to affect disclosure and therefore support available (Evans, 2014b).

In my study, the level of knowledge of dyslexia amongst the lecturers interviewed was variable, with some of the lecturers such as Billie and Judy having received no formal education and others, such as Chris, having undertaken higher level degrees in the subject. The lecturers without specialist training sought out colleagues with more experience for support or relied on personal experience of supporting their own children with dyslexia. It is important that nurses with dyslexia are supported using an evidence-based approach to ensure that practice is current and effective (Rice and Brooks, 2004, Siegel and Smythe, 2006, Locke et al., 2015).

The level of provision and specialist support available to students with dyslexia at universities was also highly variable and was dependent on the personnel available and the university policies and philosophy. Three of the lecturers interviewed had a specific

role in supporting nurses with disabilities and were very experienced in ensuring that the students were able to access specialist services. In a recent survey commissioned by the Times Higher Education, this inequality in provision was also highlighted (Speed, 2014). The British Dyslexia Association have developed a quality mark for Higher Education with the aim of improving the provision of support and understanding of dyslexia (van Daal and Tomlin, 2016), however, at the time of writing, only one university faculty had achieved this award (Speed, 2014). Many of the lecturers in this study discussed how their university was moving to a more inclusive way of working. Changes to government funding of the Disabled Students' Allowance that came into effect from September 2016 will affect students with dyslexia attending English universities. Universities will be expected to take responsibility for funding non-medical support staff such as scribes, readers and proof-readers and there will be reduced funding for computers and peripheral devices (Johnson, 2015). This is in keeping with the notion of a more inclusive approach to teaching in Higher Education and the obligation to meet the Equality Act (2010). However, there have been arguments that this will increase the financial pressure on universities and students, as well as possibly reducing the quality of specialist student support, as the market for this is opened up (Cameron, 2015). For many nurses on CPD courses, funding could come from the Access to Work scheme, as reasonable adjustments would also be needed within the workplace (GOV.UK, 2016a). Students on courses less than a year long are also not eligible for Disabled Students' Allowance (GOV.UK, 2016b). However, none of the nurses interviewed within my study had accessed the Access to Work scheme, and this may impact on their practice learning as well as everyday work.

Access to assessment for dyslexia was identified as a potential problem by both nurses and lecturers. For students to be identified as requiring assessment for dyslexia, lecturers have to recognise the signs. This requires the lecturer to have knowledge about the signs of dyslexia and access to written work. In my study, lecturers identified that early formative assessment of written work enabled earlier identification. Provision of assessment for dyslexia was particularly difficult at the beginning of the academic year. For qualified nurses accessing CPD units, they may have finished their course of study before assessments can be completed. A more inclusive approach to teaching and assessment may help these students until their diagnosis is confirmed and specialist support can be arranged (Mortimore, 2013). From the results of my study, this will rely on the universities increasing the level of training of all lecturing staff so that they are aware of needs of students with dyslexia so that they can adopt inclusive practices, as well as early identification of students with possible dyslexia. This will include the use of assistive technologies, although students with dyslexia need to be trained and supported to use these, otherwise they will not be effective or valued (Stewart, 2002), as demonstrated by the findings of this study.

As qualified nurses, all of the participants had developed compensatory strategies that had enabled them to achieve their qualification and to progress their careers. The nurses in the study valued the support to enable them to use these strategies. This support could come from colleagues, managers or lecturers. For them, it was important that these strategies were recognised and for those who had developed them successfully to be able to use them. It is recognised that each person with dyslexia is an individual (Day,

2013) and that a uniform approach to dyslexia support is not going to be effective (Busgeet, 2008).

In the workplace, the manager is the key person to enable the nurse with dyslexia to work effectively (McLoughlin and Leather, 2012). For most of the nurses, reasonable adjustments were negotiated with their manager, but this was dependent on disclosure as previously discussed. Informal support was also accessed from colleagues, which is in keeping with the survey of qualified nurses by Morris and Turnbull (2007b). The qualified nurses that had established themselves within supportive teams, even those who had not disclosed their dyslexia, felt comfortable in asking for support from colleagues. The majority of the research that has been conducted on the experiences of dyslexia in health and social care environments has been with students on initial training programmes (Price and Gale, 2006, Al Shirawi et al., 2007, Francis-Wright, 2007, Morris and Turnbull, 2007a, White, 2007, Foster, 2008, Child and Langford, 2011, McKendree and Snowling, 2011, Ridley, 2011, Sanderson-Mann et al., 2012, Evans, 2014a, McPheat, 2014) who have to move placement and would not have the benefit of developing strong relationships within the team (Blakey, 2015).

As discussed previously, all of the nurses in my study enjoyed teaching others, and this role has been shown to develop team bonds and enhance career progression, as well as being a professional requirement (Nursing and Midwifery Council, 2015a). Teaching others also encourages the teacher to learn and develop and is another way of engaging in lifelong learning (Light et al., 2009), which the nurses in my study did not seem to find as daunting as formal academic study.

Maintaining Safety

The lecturers and the nurses within the study identified that there was a professional requirement to maintain service user safety. For the nurses, this was demonstrated through the narratives with explanations of taking extra time and care with drug administration and documentation. This supports previous studies with student nurses who identified that they spent longer and were more careful with drug administration (Morris and Turnbull, 2006, Morris and Turnbull, 2007a, White, 2007, Ridley, 2011). It is of interest that most of the nurses were identified as having dyslexia before or during their nurse training, although Andy and Lesley had been qualified for many years when they were diagnosed and both were very aware of taking extra care both with drug administration and documentation. This was taken further by Andy who refused to administer drugs unsupervised which adhered to their current job description but limited promotion prospects. As in previous studies, some lecturers continued to be concerned with the safety of drug administration (Evans, 2014b). However, the majority of lecturers in my study felt that there were misconceptions about the risk and there was little evidence of risk in my literature review.

The narratives of the nurses demonstrated a number of professional compensatory strategies to ensure that they were able to practice safely. For those nurses who had more senior roles, they were able to adjust their work to suit their needs; changing working hours to reduce tiredness, reducing distraction and seeking extra administrative assistance. Extra time and effort were required to ensure that standards of practice were maintained in accordance with professional requirements (Nursing and Midwifery Council, 2015a). Others, such as Jo and Vic, sought out practice areas which were more

sympathetic or more suited to their requirements. This is in contrast to a survey by Morris and Turnbull (2007b) where the majority of nurses did not feel that their choice of work area had been influenced by their dyslexia. This was a self-reported questionnaire with little supporting evidence to validate this belief or explanations as to why they answered the question in that way. Previous experiences may also have subconsciously affected their choice of practice areas as a registered nurse.

The nurses had identified a variety of different strategies to further their learning, including the use of audio-visual tools such as YouTube which had been shown to increase the engagement, and help to facilitate deep learning in nursing students (Clifton and Mann, 2011). However, the quality of these resources can be variable (Duncan et al., 2013), which again could be a safety issue if this is a main source of learning. However, this was used as a secondary source of learning for nurses within this study, building on the previous knowledge and experience and which supported their preference for visual learning methods.

Both the nurses and the lecturers interviewed for my study identified that professional development was important for all nurses, but that there were challenges that the nurses with dyslexia needed to overcome. The findings have contributed to the understanding of how the nurses with dyslexia that were interviewed had experienced learning throughout their lives, as well as how the lecturers felt about supporting qualified nurses with dyslexia. For my research to contribute to the wider body of knowledge on the subject, it needs to have been conducted in a rigorous manner which is now discussed.

Rigour

The quality of any research is an important issue, but this is arguably more important when participants are asked to reveal detailed and personal information about their lives. It has been argued that the traditional criteria for judging research of validity, reliability, generalizability and objectivity are not applicable for interpretive research (Lincoln, 1995, Tracy, 2013) and instead criteria of credibility, transferability, dependability and confirmability should be used (Cohen et al., 2011). Credibility is the degree to which the research findings resonate with the understanding of those being studied as well as others who have researched within the field, whereas transferability is the ability of the research to transfer to other settings (Toma, 2006). Dependability is the ability of the research to produce the same results if it were to be conducted with the same participants within the same context, whereas confirmability is the ability for the research to be confirmed by someone other than the researcher (Toma, 2006).

Credibility within the research was maintained by thick description, including quotes from the participants' stories to allow the reader to contextualise the data being presented (Creswell, 2013). It may also be achieved through triangulation or crystallisation. Triangulation was achieved through the inclusion of interviews with lectures as well as the use of an asynchronous online discussion forum so that multiple methods and sources of data collection were used (Tracy, 2013). Crystallisation is a concept where, in this case, the narrative stories are viewed from different points of view (Denzin and Lincoln, 2011). This was achieved by the use of the hermeneutic cycle and participants' contributions throughout the process, such as asking the participants to discuss and confirm their stories and contribute to the analysis of the themes (Toma,

2006). The checking of the participants' views is considered to be the most important technique in establishing credibility (Lincoln and Guba 1985 cited in Creswell, 2013).

Many of the techniques used to establish credibility were also used to establish transferability (Creswell, 2013). Readers will require enough information to be able to decide whether the research applies to their situation, including context, thick description, methodology and if the results concur with previous findings (Toma, 2006). It is suggested that it is the responsibility of the reader, not the researcher, to establish if the research is transferable to their situation or requirements (Toma, 2006).

Dependability can be seen as paralleled to reliability (Lincoln et al., 2013) and this can cause problems within narrative research. As previously discussed narratives will change over time and context (Chase, 2013) and this will affect dependability. Again, all of the previous methods for maintaining transferability and credibility would be applicable with a caveat that narrative research does not make a claim of dependability. The inclusion of exceptions is important (Toma, 2006), and these were included within the findings, analysis and conclusions.

Confirmability and dependability were enhanced by the inclusion of self-reflection by the researcher, identifying where any biases might exist and any assumptions and values that might influence the study. Again, the use of the participants confirming the interpretation throughout aided this process, and is linked to emerging criteria for judging the quality of qualitative work which is Voice as described by Lincoln (1995). She suggests that there should be a commitment from the researcher for participation and what multiple voices should be heard (Lincoln, 1995).

Summary

This chapter has synthesised the finding of the narratives from the nurses and lecturers interviewed during my study. A new model has been developed to demonstrate the impact that dyslexia has had on the qualified nurses on both a personal and professional level. The emotional impact of dyslexia was apparent both personally and professionally, affecting engagement in lifelong learning and also disclosure. Without disclosure, nurses were not able to access reasonable adjustments in the academic or practice setting. It was also noted from the nurses and the lecturers that not all of the nurses were formally identified as having dyslexia until initially accessing higher education and that early identification and access to assessment was important to enable reasonable adjustments. As the nurse lecturer was often the first person to recognise possible signs of dyslexia, they needed to have the knowledge and skills to be able to do this. The use of inclusive teaching and learning practices will help to reduce the amount of adjustments required and support those who do not wish to disclose.

The nurses within my study had developed a wide range of compensatory strategies to enable them to practice effectively, although these required time and effort to be effective. They were particularly concerned with ensuring that they maintained patient safety and had a strong desire to develop themselves and others. These compensatory strategies were less effective when tired or stressed and during transitions, either because of a change in academic level, the area of practice or style of written assessment.

Support both personally and professionally was identified as important to enable the career development and lifelong learning of qualified nurses. This support often initially

came from family and friends but then from teachers both at school and university and from managers and colleagues in practice. Support enabled the nurses to develop and apply compensatory strategies and to manage the emotional impact of dyslexia both in practice and academic settings. The next chapter will explore the recommendations for both education and practice that have emerged from this research.

Chapter Eight: Conclusions and Recommendations

Introduction

This thesis has presented a narrative approach to investigating nurses' personal and professional experiences of dyslexia in lifelong learning. This final chapter draws together the conclusions of the study, linking the research questions to the findings and the implications of the study on nursing practice and education. This chapter also demonstrates my contribution to the body of knowledge about qualified nurses with dyslexia, while discussing the limitations of this research. In this, I will also reflect on how I have developed over the course of the Doctorate in Education, as a researcher and how the research has impacted on my practice as a nurse lecturer. The chapter concludes with recommendations for policy, educational practice and research.

At the start of this journey through my study, I had planned to undertake research with both student nurses and qualified nurses to investigate their experiences of having dyslexia within the nursing profession. It soon became apparent that not only was there an increasing body of research being undertaken with student nurses but the purpose of my study would be better served by investigating the experiences of qualified nurses, and that including students would not add any further insights. This was because the qualified nurses reflected back on their experiences as students as part of their narrative and were able to contextualise their experiences within their wider professional career and personal development. The literature review also illustrated that there was very little research that had been undertaken on the experiences of qualified health and social care professionals with dyslexia and therefore demonstrated a potential gap in the knowledge base that could be investigated. This research has therefore led to an

increase in the understanding of the lived experiences of qualified nurses with dyslexia and how this has affected their engagement with lifelong learning, something that has not been studied before.

Methodological considerations

The methodology chosen to conduct the research was situated within the constructivist paradigm and conducted through a narrative approach. This allowed the participants' voices to be heard with the aim of presenting their story as they felt that they had experienced it. This method was aligned to the biographical approach to lifelong learning which suggests that the participants would learn from narrating their life histories (Alheit, 2012). Throughout the interviews, whether conducted face-to-face, by telephone or using Skype, the participants gave detailed, rich description of their experiences of either living with dyslexia in the case of the nurses or supporting nurses with dyslexia in the case of the lecturers. An attempt was made to maintain the voice of the participants following template analysis with the use of asynchronous online discussion forums to enable the participants to comment on and verify the themes identified. It also enabled the participants to engage with and learn from the experiences of others, an unanticipated but positive outcome of this method.

The synthesis of findings were analysed further in relation to psychological and sociological theories including lifecourse theory, self-determination theory, and ecological systems theory. This is in keeping with the conceptual framework that the nurses and lecturers cannot be viewed in isolation and that previous experience and social circumstances will all impact on their lived experiences of dyslexia. This synthesis developed a new model to demonstrate the effect that dyslexia has on the qualified

nurse on both a personal and professional level. This impact has implications for nurse education and practice and these will now be addressed.

Implications for Lifelong Learning and Education for Registered Nurses with Dyslexia

Nursing is changing, with a requirement for a more flexible workforce and higher academic qualifications to meet the increasing demands of an ageing population and more complex health problems (Willis, 2015). These increasingly complex care requirements will require the nurse to continue to engage in lifelong learning long after they have qualified as a nurse. With a shortage of nurses (NHS Improvement, 2016) and a potential for more than the average 4-10 percent of the nursing population having dyslexia (Taylor and Walter, 2003), the needs of this group of nurses cannot be ignored, either legally, due to the Equality Act (2010) or practically. Changes to nurse education and standards for supporting learning and assessment in practice that will occur in the next few years will bring about a degree of uncertainty (Willis, 2015). However, they may also bring opportunities for registered nurses with dyslexia to develop their roles and find areas of practice that suit their strengths and mitigate the difficulties that dyslexia can bring. These changes in standards may also bring the opportunity to further recognise the needs of nurses with dyslexia and include recommendations in any new policies.

The aim of the research was to answer three main research questions: how has dyslexia affected qualified nurses' lives and development strategies over their careers: how has dyslexia affected qualified nurses' engagement with learning: and what strategies are effective in supporting qualified nurses with dyslexia? The findings of the research

demonstrated that qualified nurses were affected by dyslexia in a number of ways both personally and professionally. All of the nurses had developed compensatory strategies to protect themselves and the patients that they cared for. However, not all of these strategies were likely to be beneficial in the longer term; especially the use of disguise, and many took additional time and effort, leading to increasing demands both on the nurse and those supporting them. This could be further compounded by increasing demands on nurses, both in terms of their own knowledge and skills but also teaching and supporting newly qualified nurses and unregistered support workers (CoDH Shape of Caring Advisory Group, 2016).

The synthesis of the findings demonstrated that dyslexia had an emotional impact on the nurse, whatever stage in their life that they had been diagnosed and while the impact of this was reduced as the nurse progressed in their careers, their academic and professional self-concept was rather precarious. This impacted on their willingness to disclose their dyslexia both in academic and workplace environments, engage in academic study and therefore impacted on potential career progression and potentially nurse retention. Support of parents, teachers, and friends or colleagues mitigated some of these issues, and therefore it is important that this psychological support is available in an acceptable form to the nurses with dyslexia.

Early disclosure of dyslexia was seen by the lecturers as really important to enable reasonable adjustments to be implemented, although, for nurses, disclosure was a threatening process, which could have implications for their professional and academic self-concepts. Disclosure for many was initiated on a need to know basis and dependent

on personal relationships and perceived threats. While this is a very complex issue there are several ways of mitigating this. The development of a good relationship with knowledgeable practitioners who do not perceive nurses with dyslexia as a danger to the profession would reduce the stigma, which was still perceived by the nurses and identified by the lecturers, and increase the likelihood of disclosure. Positive role models of nurses with dyslexia who could demonstrate career and academic achievement, as well as act as a support, might also be beneficial. This may also encourage nurses to engage in continuing professional development and return to academic study. Recent cuts to funding of CPD may have an impact on this, however, as there may be less access to courses or nurses with dyslexia may have to access specific courses at different universities, as universities choose to drop courses with small number of applicants (Greatbatch, 2016). This will impact on issues of transition and relationships, which will be discussed later.

Linked with disclosure is early identification of dyslexia in those who had either not disclosed, or more often, not been formally assessed. Lecturers recognised that there are nurses who have not been identified earlier in their lives and many of the participants were diagnosed during their nurse training or in post-qualifying study. The nurse lecturer is often the first person to recognise the signs of dyslexia, but this is dependent on the knowledge of the lecturer and early submission of written work.

The findings also demonstrated that dyslexia affected the executive functioning of nurses, which in turn influenced their ability to reach their potential both in academic and practice settings. Increased stress and tiredness worsen these issues. Assistive

technology has the potential to support nurses with dyslexia, but the findings identified that this was not used unless specific training was given and it was seen as beneficial. The literature also identified that dyslexic adults with higher levels of executive and metacognitive functioning have higher levels of job satisfaction (Leather et al., 2011) therefore it is important to develop these skills.

The nurses described a variety of learning preferences which included the use of visual, kinaesthetic and auditory methods. They felt that learning was easier if they were able to apply the new information to their area of practice. Most felt that they were better able to show their knowledge verbally rather than in a written form, although not everyone liked presentations. Inclusive methods of teaching and learning benefit all students in the class, including those who do not have dyslexia (Wray et al., 2012a, Azzopardi et al., 2014), but especially those who are undiagnosed or do not wish to disclose dyslexia. Inclusive teaching and learning strategies are in keeping with the Equality Act (2010) and current policy and funding provision (Cameron, 2015).

Transitions caused problems both in practice and in academic settings. Increase in academic level and changing types of written assignments caused difficulties which were recognised by both nurses and lecturers. The nurses needed to develop relationships to feel comfortable to disclose and time to get used to documentation, structure, and level of assignments.

The use of exemplars both in theory and in practice was seen as beneficial by the nurses with dyslexia. Nurses with dyslexia discussed how they found the structure of any assignment as difficult to navigate as the academic content. Nurses in practice either

developed their own format to structure their nursing notes or reports or were drawn to areas with structured documentation or electronic health care records.

Managers were identified as key people in practice who were able to ensure reasonable adjustments were accessible. This was dependent on disclosure and the knowledge of the manager and culture of the practice environment. The qualified nurses identified comments from colleagues could either be supportive and promote disclosure and access to reasonable adjustments or negative and be disabling. The manager is the key person to role model and influenced the practice area as a learning environment (Walker et al., 2011) and therefore they need to have the knowledge of how best to support nurses with dyslexia.

Key Conclusions

While dyslexia could be seen to have a big impact on nurses both personally and professionally they had developed compensatory mechanisms to enable them to be effective practitioners and engage in learning. However, these strategies came at a cost to themselves in both effort and in some cases career progression. The strategies developed to enable engagement in learning were not always effective and were dependent on the personality traits of the nurse and their resilience. Childhood and early career experiences of supportive relationships impacted on how they engaged in learning and how they viewed their capabilities as learners. Early identification of dyslexia also had a positive effect, with the nurses attributing difficulties to dyslexia rather than lack of intellectual ability and accessing support earlier.

The study also demonstrated that there was still a lack of understanding of dyslexia and a fear that nurses with dyslexia were a risk to patient safety or the profession. This was clearly not the case as demonstrated in the literature review and the narratives of the nurses. However, these myths perpetuate the stigma associated with dyslexia in nursing, inhibited disclosure, which in the current provision reduced the support available.

Inclusive approaches to teaching and learning would help mitigate this problem, although wider education and understanding would also improve the situation.

Limitations

As with all research, there are limitations to this study. Data were collected from a small self-selecting sample, therefore, may not be representative of the experiences of all registered nurses with dyslexia, as the way that dyslexia affects registered nurses is variable (Wajuihian and Naidoo, 2012). Nurses and lecturers with strong views or interest in the subject are more likely to volunteer to be involved in research than those who are ambivalent. It must also be recognised that many factors may influence the way that the registered nurses and lecturers express their narrative, including the influence of the researcher, although this is in keeping with the constructivist paradigm (Lincoln et al., 2013) in which this research is situated. The use of the online discussion forum, member checking both the stories and the themes would have reduced some of these effects (Mero-Jaffe, 2011) but they should still be acknowledged.

This was also not a comparative study and whilst the participants were asked to describe the effects that dyslexia had on their learning and careers, some of the experiences that they described may also have occurred had they been a nurse without dyslexia.

Implications of My Research on My Practice

While I had an interest in dyslexia before starting my Doctorate in Education, which led me to conduct this research, this interest has developed into a passion and has become part of my role within the institution that I work. The stories that I have heard from the nurses within my study have inspired me to address the lack of support locally for nurses with dyslexia. I have organised study skills sessions and having undertaken further training, have taken on this role. I have engaged with external providers to provide assessment and specialist support as well as engaging in disability rights campaigns. Interviews with lecturers have enabled me to engage with those within the profession and to share best practice, as did the use of Twitter. I have also been able to present some findings to a conference for nurse educators, a nursing leadership conference and a research conference.

As a researcher, the process has enabled me to critically explore my own ontology, epistemology, and axiology. I have been able to reflect on how these have influenced how the research was conducted and also the findings. I have been able to learn new research techniques such as different approaches to conducting interviews, as I had only previously engaged in face-to-face interviews, and the use of template analysis was also new to me. Technically I have learned how to use Twitter, develop a website and use NVivo. I have been able to gain a much greater depth of understanding from the literature about dyslexia and lifelong learning but for me, the most important information was that which I learnt from my participants' stories, and I am really grateful to them for sharing their experiences. I have also identified that I am a very visual

learner, something that is very compatible with many of the students that I am now supporting.

In the near future, I plan to disseminate my findings both locally with colleagues and to the wider nursing community by publication. I have taken on the role as Disability Lead within my organisation and will be developing this role to support student and qualified nurses, as well as other post-qualifying students from health and social care professions with dyslexia who engage on our programmes of learning.

Recommendations for Policy, Practice and Research

The following recommendations have been developed from the findings of my research and further reading. It must be recognised that the recommendations are made within a real world of education and practice. They will, therefore, be proposed recognising driving and restraining forces that will impact on their implementation such as regulatory, legislative and financial influences. They will be presented in sections titled policy, practice, and research. Practice will encompass practice in higher education, as well as the nurses' workplaces, as the research demonstrated an impact of dyslexia for nurses in both areas, and lifelong learning occurs both in academic and practice settings

Policy

- 1. There is a requirement for all nurse educators to engage in best practice that supports dyslexic students through the media of inclusive teaching and learning approaches. It is further recommended that inclusive teaching and learning approaches be incorporated into the new Nursing and Midwifery Council Education Framework for Nursing.**

The findings demonstrated that there was an inconsistent approach to education about dyslexia for lecturers, and where provided, it was not always seen as a priority. All nurse lecturers should be required to engage in learning incorporating the recognition and support of nurses with dyslexia. While it is appreciated that there are competing demands on lecturers' time, initial education should reduce the time taken by the lecturers to consult with colleagues or giving ineffective support to nurses. This programme of learning would include the identification of dyslexia and the assessment process and procedures, as well as inclusive teaching and learning strategies including the principles of UDL. This would be in keeping with current guidance (Disabled Students Sector Leadership Group, 2017). This education must also address the myths surrounding nurses with dyslexia and the risks to patient safety (Evans, 2014b). This could be included in the new requirements for learning and assessment for nursing and midwifery programmes outlined in the draft education framework (Nursing and Midwifery Council, 2017) and incorporated into initial education for lecturers.

2. Clear guidance on accepted reasonable adjustments for learning in both academic and practice settings from the regulatory and quality assurance bodies.

Although there is a move towards a more inclusive curriculum, partly due to decreased funding from central government through the Disabled Student Allowance (Johnson, 2015), nurses with dyslexia are still entitled to reasonable adjustments under the Equality Act (2010). While reasonable adjustments are dependent on student need and reasonable application of resources (Equality Act, 2010), the findings from this study and the literature review demonstrated that there was variability in how reasonable adjustments were interpreted, with very

little guidance given on how to apply them in reality. Nurses are still required to meet professional and academic standards, and therefore reasonable adjustments must also align with university assessment criteria and professional requirements. Policy should make it clear to those in human resource roles, faculty disability leads, managers and nurses what strategies can and should be implemented to support nurses with dyslexia including reasonable adjustments, with clear guidance as to what that actually means in terms of everyday learning and assessment.

Practice

3. Improved and flexible access to academic counselling

The findings demonstrated the emotional impact of dyslexia and previous educational experiences on nurses' engagement in learning. Pastoral support should be available in the form of academic counselling to nurses. This support should be flexible and will need to be available before starting any potential course, to enable those who feel that they might not be able to engage in further learning to access it. This counselling would enable nurses with dyslexia to discuss any anxieties about returning to study, increase awareness of the support available and encourage engagement in lifelong learning. Practice Education Facilitators or those in a similar practice education roles may be in an ideal position to facilitate this due to the nature of their roles and collaboration with both universities and qualified nurses in the workplace. However, they would require further training in many cases, have the time for the role and a positive attitude to nurses with dyslexia. Earlier access to counselling would enable those who have not sought formal assessment to do so prior to starting back at university, reducing the time that they would not be entitled

to reasonable adjustments. It would also allow signposting to study skills that could be undertaken prior to recommencing studies.

4. Implementation of inclusive teaching, learning and assessment strategies

Teaching should include inclusive methods to enable nurses to utilise their preferred learning approaches and engage with the material. This may include the use of podcasts, lecture capture, and videos that could be available to all students on virtual learning platforms. This provision would be enabling for those who are undiagnosed or reluctant to be seen as different. While initial investment would be required, this may be cost effective in the longer term on staff time and resources, as in some cases it may replace additional face-to-face teaching, especially for those who require extended support. The use of the principles of UDL should be considered to improve the accessibility of provision for nurses with dyslexia, as well as other students with different learning preferences and differences. This would include flexibility and choice of assessment method, as long as the required competencies and outcomes are achieved.

5. Improved access to study support

Both lecturers and nurses recognised that there was a wider impact of dyslexia on academic achievement than just grammar and spelling. Study skills sessions should include time and stress management and training on the use of assistive technology. This support should be increased at transition points such as an increase in academic level. This should be available to all students to negate the requirement for disclosure of dyslexia and would also be available to those who have yet to be identified and assessed. While these sessions are often included in pre-registration

nursing programmes, it is important that this is also available to post-qualifying students, including those considering undertaking CPD courses. Consideration would need to be given to the cost and time implications for this and how non-university students would be able to access this provision if they wish prior to starting a programme or module.

6. Development of a support network of nurses with dyslexia

The stigma associated with dyslexia was evident from the findings of the nurses and the lecturers and this affected disclosure. The development of a network of nurses with dyslexia who can act as role models and buddies for both qualified and student nurses with dyslexia may help to reduce this over the longer term.

Research

7. Further Research

Future research in the field could develop on from the results of this study. The literature review found that there was little research on the effectiveness of inclusive teaching and learning or UDL and further research should be conducted in this area.

Research could be conducted on the implementation of some of the recommendations and if they, in fact, make any difference to the engagement and support of qualified nurses in lifelong learning. The research could also be repeated with a bigger sample and with different researchers to increase the credibility and confirmability of the findings.

The findings also demonstrated the effects of dyslexia on the practice of qualified nurses and the key roles that managers and colleagues have in supporting learning in practice, as well as the support required for academic study. Further research could be undertaken with managers and those responsible for practice development to ascertain

their knowledge and experience of supporting nurses with dyslexia and any impact that this may have on satisfaction and retention of nurses with dyslexia.

Research could also be undertaken to investigate the effects of dyslexia on the work-based learning of qualified nurses, as while it was mentioned, there was a major focus on more formal and university-based learning within this study.

An important aspect of this study was the aim to maintain the voices of the participants. The only way to fully understand the experiences of nurses with dyslexia is to listen to their experiences and to ensure that what they tell us is faithfully portrayed in the research presented. Future research should seek to maintain the voices of these participants so that their stories can be understood and that recommendations made are appropriate to meet their needs.

Summary

To conclude, the findings of the study have demonstrated that dyslexia does have an impact on nurses, personally and professionally, which affects how they engage with learning and the support that they require to reach their potential. This chapter has identified the implications that the changing role of nurses and nurse education may have on nurses with dyslexia and made recommendations for policy, educational practice and further research. This chapter has also demonstrated how I have developed through the research process and how I have been able to use the findings from my study in my practice to support nurses with dyslexia.

References

- Al Shirawi, L., McDonald, F. and Newton, J. T. (2007) 'Dyslexia and errors of left-right discrimination in undergraduate dental and postgraduate orthodontic students', *Journal of Disability & Oral Health*, 8(1), pp. 23-27.
- Alexander-Passe, N. (2006) 'How dyslexic teenagers cope: an investigation of self-esteem, coping and depression', *Dyslexia*, 12(4), pp. 256-275.
- Alexander-Passe, N. (2015) *Dyslexia and Mental Health*. London: Jessica Kingsley Publishers.
- Alheit, P. (2005) 'Stories and structures: An essay on historical times, narratives and their hidden impact on adult learning', *Studies in the Education of Adults*, 37(2), pp. 201-212.
- Alheit, P. (2009) 'Biographical learning- within the new lifelong learning discourse', in Illeris, K. (ed.) *Contemporary theories of learning: Learning theorists ... In their own words*. Abingdon: Routledge.
- Alheit, P. (2012) 'The biographical approach to Lifelong Learning', in Jarvis, P. & Watts, M. (eds.) *The Routledge International Handbook of Learning*. London: Routledge.
- Alvesson, M. and Skoldberg, K. (2009) *Reflexive Methodology: New Vistas for Qualitative Research*. 2nd edn. London: SAGE.
- Ansell, L. and Dougherty, L. (2011) 'Medicines Management', in Dougherty, L. & Lister, S. (eds.) *The Royal Marsden Hospital Manual of Clinical Nursing Procedures*. 8th ed. Chichester: Wiley-Blackwell.
- Armstrong, D. and Humphrey, N. (2009) 'Reactions to a Diagnosis of Dyslexia among Students Entering Further Education: Development of the "Resistance-Accommodation" Model', *British Journal of Special Education*, 36(2), pp. 95-102.
- Ashcroft, T. J. and Lutfiyya, Z. M. (2013) 'Nursing educators' perspectives of students with disabilities: A grounded theory study', *Nurse Education Today*, 33(11), pp. 1316-1321.
- Atkinson, R. (2012) 'The Life Story Interview as a Mutually Equitable Relationship', in Gubrium, J.F., Holstein, J.A., Marvasti, A.B. & McKinney, K.D. (eds.) *The SAGE Handbook of Interview Research: The Complexity of the Craft*. Thousand Oaks, CA: SAGE.
- Azzopardi, T., Johnson, A., Phillips, K., Dickson, C., Hengstberger-Sims, C., Goldsmith, M. and Allan, T. (2014) 'Simulation as a learning strategy: Supporting undergraduate nursing students with disabilities', *Journal of Clinical Nursing*, 23(3-4), pp. 402-409.
- Bacon, A. M. and Handley, S. J. (2014) 'Reasoning and dyslexia: Is visual memory a compensatory resource?', *Dyslexia: An International Journal of Research and Practice*.
- Bahn, D. (2007a) 'Orientation of nurses towards formal and informal learning: Motives and perceptions', *Nurse Education Today*, 27(7), pp. 723-730.
- Bahn, D. (2007b) 'Reasons for post registration learning: Impact of the learning experience', *Nurse Education Today*, 27(7), pp. 715-722.
- Baron, S., Phillips, R. and Stalker, K. (1996) 'Barriers to Training for Disabled Social Work Students', *Disability & Society*, 11(3), pp. 361-378.
- Bartlett, D., Moody, S. and Kindersley, K. (2010) *Dyslexia in the Workplace*. Chichester: Wiley-Blackwell.
- Bazeley, P. and Jackson, K. (2013) *Qualitative data analysis with NVivo*. 2 edn. London: SAGE.
- Beneventi, H., Finn Egil, T., Ersland, L. and Hugdahl, K. (2010) 'Working Memory Deficit in Dyslexia: Behavioral and fMRI Evidence', *International Journal of Neuroscience*, 120(1), pp. 51-59.
- Bengtson, V. L., Elder, G. H. and Putney, N. M. (2005) 'The Lifecourse Perspective on Ageing: Linked Lives, Timing and History', in Johnson, M.L. (ed.) *The Cambridge Handbook of Age and Ageing*. Cambridge: Cambridge University Press.
- Benner, P. (2001) *From Novice to Expert: Excellence and Power in Clinical Nursing Practice*. Commemorative edn. New Jersey: Prentice Hall Health.

- Bevan, J. (2013) 'Disabled occupational therapists – asset, liability ... or ‘watering down’ the profession?', *Disability & Society*, 29(4), pp. 583-596.
- Biesta, G. (2006) 'What's the Point of Lifelong Learning if Lifelong Learning Has No Point? On the Democratic Deficit of Policies for Lifelong Learning', *European Educational Research Journal*, 5(3-4), pp. 169-180.
- Biesta, G., Field, J., Hodgkinson, P., Macleod, F. and Goodson, I. (2011) *Improving Learning through the Lifecourse: Learning Lives*. Kindle edn. Abingdon: Routledge.
- Björklund, M. (2011) 'Dyslexic Students: Success Factors for Support in a Learning Environment', *The Journal of Academic Librarianship*, 37(5), pp. 423-429.
- Black, D. R., Weinberg, L. A. and Brodwin, M. G. (2014) 'Universal Design for Instruction and Learning: A Pilot Study of Faculty Instructional Methods and Attitudes Related to Students with Disabilities in Higher Education', *Exceptionality Education International*, 24(1), pp. 48-64.
- Black, S., Baillie, L. and Kane, C. (2011) 'Developing the skills to support nursing and midwifery students with specific learning differences in practice', *The Journal of Practice Teaching and Learning*, 11(2), pp. 9-26.
- Blaikie, N. (2004) 'Philosophy of Social Research', in Lewis-Black, M.S., Bryman, A. & Futing Liao, T. (eds.) *Encyclopedia of Social Science Research Methods*. Thousand Oaks, CA: SAGE.
- Blakey, E. (2015) 'Teamwork and solidarity: improving health care for all', *British Journal of Nursing*, 24(22), pp. 1164-1164.
- Bleich, M. R., MacWilliams, B. R. and Schmidt, B. J. (2015) 'Advancing Diversity Through Inclusive Excellence in Nursing Education', *Journal of Professional Nursing*, 31(2), pp. 89-94.
- Bold, C. (2012) *Using Narrative Research*. London: SAGE.
- Bolt, D. (2004) 'Disability and the Rhetoric of Inclusive Higher Education', *Journal of Further and Higher Education*, 28(4), pp. 353-358.
- Borg, S. (2001) 'The Research Journal: A Tool for Promoting and Understanding Researcher Development', *Language Teaching Research*, 5(2), pp. 156-77.
- Botham, K. and Nicholson, J. (2014) 'Supporting the transition of disabled students from university to practice placement', *Disability and Society*, 29(3), pp. 460-476.
- Brandt, S. (2011) 'From Policy to Practice in Higher Education: The experiences of disabled students in Norway', *International Journal of Disability, Development & Education*, 58(2), pp. 107-120.
- Brekelmans, G., Poell, R. F. and van Wijk, K. (2013) 'Factors influencing continuing professional development. A Delphi study among nursing experts', *European Journal of Training and Development*, 37(3), pp. 313-325.
- Brine, J. (2006) 'Lifelong learning and the knowledge economy: those that know and those that do not—the discourse of the European Union', *British Educational Research Journal*, 32(5), pp. 649-665.
- Bristol Royal Infirmary Inquiry (2001) *The inquiry into the management of care of children receiving heart surgery at the Bristol Royal Infirmary 1984-1995*. Norwich: Her Majesty's Stationary Office. Available at: <http://webarchive.nationalarchives.gov.uk/20090811143745/http://www.bristol-inquiry.org.uk/index.htm> (Accessed: 19th September 2013).
- British Dyslexia Association (2012a) *The Dyslexia Handbook 2012*. Bracknell: British Dyslexia Association.
- British Dyslexia Association (2012b) *What are Specific Learning Difficulties?* Available at: <http://www.bdadyslexia.org.uk/about-dyslexia/schools-colleges-and-universities/what-are-specific-learning-difficulties.html> (Accessed: 20th November 2012).
- Bronfenbrenner, U. (1976) 'The Experimental Ecology of Education', *Educational Researcher*, 5(9), pp. 5-15.

- Bronfenbrenner, U. (1977) 'Toward an experimental ecology of human development', *American Psychologist*, 32(7), pp. 513-531.
- Brooks, J., McCluskey, S., Turley, E. and King, N. (2015) 'The Utility of Template Analysis in Qualitative Psychology Research', *Qualitative Research in Psychology*, 12(2), pp. 202-222.
- Browne, B. C. (2013) 'Recording the Personal: The Benefits in Maintaining Research Diaries for Documenting the Emotional and Practical Challenges of Fieldwork in Unfamiliar Settings', *International Journal of Qualitative Methods*, 12, pp. 420-435.
- Bruner, J. (2004) 'Life as Narrative', *Social Research*, 71(3), pp. 691-710.
- Brunswick, N. (2012) 'Dyslexia in UK Higher Education and Employment', in Brunswick, N. (ed.) *Supporting Dyslexic Adults in Higher Education and the Workplace*. Chichester: Wiley-Blackwell.
- Budd, J. M. (2008) 'Critical Theory.', in Given, L.M. (ed.) *The SAGE Encyclopedia of Qualitative Research Methods*. Thousand Oaks, CA: SAGE.
- Burden, R. (2008) 'Dyslexia and Self-Concept: A Review of Past Research with Implications for Future Action', in Reid, G., Fawcett, A.J., Manis, F. & Siegel, L. (eds.) *The SAGE Handbook of Dyslexia*. London: SAGE.
- Burden, R. and Burdett, J. (2005) 'Factors associated with successful learning in pupils with dyslexia: a motivational analysis', *British Journal of Special Education*, 32(2), pp. 100-104.
- Burke, L. M. (2006) 'The process of integration of schools of nursing into higher education', *Nurse Education Today*, 26(1), pp. 63-70.
- Burns, E. and Bell, S. (2010) 'Voices of Teachers with Dyslexia in Finnish and English Further and Higher Educational Settings', *Teachers and Teaching: Theory and Practice*, 16(5), pp. 529-543.
- Burns, E. and Bell, S. (2011) 'Narrative construction of professional teacher identity of teachers with dyslexia', *Teaching & Teacher Education*, 27(5), pp. 952-960.
- Burns, E., Poikkeus, A.-M. and Aro, M. (2013) 'Resilience strategies employed by teachers with dyslexia working at tertiary education', *Teaching and Teacher Education*, 34(0), pp. 77-85.
- Busgeet, T. (2008) *Dyslexia in Higher Education: exploring lecturers' perspectives of dyslexia, dyslexic students and support strategies*. Doctor of Philosophy, University of Liverpool, Liverpool.
- Caduri, G. (2013) 'On the Epistemology of Narrative Research in Education', *Journal of Philosophy of Education*, 47(1), pp. 37-52.
- Caldwell, K., Henshaw, L. and Taylor, G. (2011) 'Developing a framework for critiquing health research: An early evaluation', *Nurse Education Today*, 31(8), pp. e1-e7.
- Callens, M., Tops, W. and Brysbaert, M. (2012) 'Cognitive profile of students who enter higher education with an indication of dyslexia', *Plos One*, 7(6), pp. e38081-e38081.
- Cameron, H. (2015) 'The Narrow Way', *Times Higher Education*, 17th December. Available at: <https://www.timeshighereducation.com/comment/the-market-will-drive-out-dyslexic-students> (Accessed 21st February 2016).
- Cameron, H. and Nunkoosing, K. (2012) 'Lecturer Perspectives on Dyslexia and Dyslexic Students within One Faculty at One University in England', *Teaching in Higher Education*, 17(3), pp. 341-352.
- Candy, P. C., Crebert, G. and O'Leary, J. (1994) *Developing Lifelong Learners through Undergraduate Education*, Canberra: Australian Government Publishing Service.
- Carawan, L. W., Nalavany, B. A. and Jenkins, C. (2015) 'Emotional experience with dyslexia and self-esteem: the protective role of perceived family support in late adulthood', *Aging & Mental Health*, pp. 1-11.

- Carey, P. (2012) 'Exploring variation in nurse educators' perceptions of the inclusive curriculum', *International Journal of Inclusive Education*, 16(7), pp. 741-755.
- Carroll, J. M. and Iles, J. E. (2006) 'An assessment of anxiety levels in dyslexic students in higher education', *British Journal of Educational Psychology*, 76(3), pp. 651-662.
- Casey, B., Proudfoot, D. and Corbally, M. (2016) 'Narrative in nursing research: an overview of three approaches', *Journal of Advanced Nursing*, 72(5), pp. 1203-1215.
- CASP UK (2013) *Critical Appraisal Skills Programme: CASP checklists*. Available at: <http://www.casp-uk.net/casp-tools-checklists> (Accessed: 13th May 2014).
- CAST (2011) *Universal Design for Learning Guidelines version 2.0*. Wakefield, MA: CAST. Available at: <http://www.udlcenter.org/aboutudl/udlguidelines/downloads>.
- Chae, B. (2015) 'Insights from hashtag #supplychain and Twitter Analytics: Considering Twitter and Twitter data for supply chain practice and research', *International Journal of Production Economics*, 165, pp. 247-259.
- Chase, S. E. (2013) 'Narrative Inquiry: Still a field in the Making', in Denzin, N.K. & Lincoln, Y.S. (eds.) *Collecting and Interpreting Qualitative Materials*. 4th ed. Thousand Oaks: SAGE.
- Chih Hoong, S. (2009) 'Medicalising disability? Regulation and practice around fitness assessment of disabled students and professionals in nursing, social work and teaching professions in Great Britain', *Disability & Rehabilitation*, 31(18), pp. 1520-1528.
- Child, H., Jay, R., Menten, J. C., Pavlish, C. and Phillips, L. R. (2014) 'Using Facebook and participant information clips to recruit emergency nurses for research', *Nurse Researcher*, 21(6), pp. 16-21.
- Child, J. and Langford, E. (2011) 'Exploring the learning experiences of nursing students with dyslexia', *Nursing Standard*, 25(40), pp. 39-46.
- Clandinin, D. J. and Murphy, M. S. (2007) 'Looking Ahead: Conversations with Elliot Mishler, Don Polkinghorne, and Amia Lieblich.', in Clandinin, D.J. (ed.) *Handbook of Narrative Inquiry: Mapping a Methodology*. Thousand Oaks, CA: SAGE.
- Clandinin, D. J. and Rosiek, J. (2007) 'Chapter 2 Mapping a Landscape of Narrative Inquiry: Borderland Spaces and Tensions. Handbook of Narrative Inquiry: Mapping a Methodology. SAGE Publications, Inc', in Clandinin, D.J. (ed.) *Handbook of Narrative Inquiry: Mapping a Methodology*. Thousand Oaks, CA: SAGE Publications, Inc.
- Clifton, A. and Mann, C. (2011) 'Can YouTube enhance student nurse learning?', *Nurse Education Today*, 31(4), pp. 311-313.
- CoDH Shape of Caring Advisory Group (2016) *Educating the Future Nurse - a paper for discussion*. London: Council of Deans of Health.
- Coffield, F., Moseley, D., Hall, E. and Ecclestone, K. (2004a) *Learning styles and pedagogy in post-16 learning* London: Learning and Skills Research Centre. Available at: <http://sxills.nl/lerenlerennu/bronnen/Learning%20styles%20by%20Coffield%20e.a..pdf> (Accessed: 25th February 2016).
- Coffield, F., Moseley, D., Hall, E. and Ecclestone, K. (2004b) *Should we be using learning styles? What research has to say to practice* London: Learning and Skills Research Centre. Available at: http://www.itslifejimbutnotasweknowit.org.uk/files/LSRC_LearningStyles.pdf (Accessed: 25th February 2016).
- Cohen, L., Manion, L. and Morrison, K. (2011) *Research Methods in Education*. 7th edn. Abingdon: Routledge.
- Collinson, C. and Penketh, C. (2010) 'Sit in the corner and don't eat the crayons': postgraduates with dyslexia and the dominant 'lexic' discourse', *Disability & Society*, 25(1), pp. 7-19.
- Corno, L. and Anderman, E. M. (2016) *Handbook of Educational Psychology*. New York: Routledge.

- Cowen, M. (2010) *Dyslexia, dyspraxia and dyscalculia: a toolkit for nursing staff*. London: Royal College of Nursing.
- Creswell, J. W. (2013) *Qualitative Inquiry and Research Design: Choosing among the Five Approaches*. Thousand Oaks: SAGE.
- Creswell, J. W. (2014) *Research design; quantitative, quantitative and mixed methods approaches*. 4th edn. Thousand Oaks: SAGE.
- Curtis, B. L. (2014) 'Social Networking and online recruiting for HIV Research: ethical challenges', *Journal of Empirical Research on Human Research Ethics*, 9(1), pp. 58-70.
- Dale, C. and Aiken, F. (2007) *A Review of the Literature into Dyslexia in Nursing Practice*. London: Royal College of Nursing.
- Dale, M. and Taylor, B. (2001) 'How Adult Learners Make Sense of Their Dyslexia', *Disability & Society*, 16(7), pp. 997-1008.
- Dalun, Z., Landmark, L., Reber, A., Hsien Yuan, H., Oi-man, K. and Benz, M. (2010) 'University Faculty Knowledge, Beliefs, and Practices in Providing Reasonable Accommodations to Students With Disabilities', *Remedial & Special Education*, 31(4), pp. 276-286.
- Davies, D. (1999) 'Learning to Succeed' - the UK Government's White Paper', *Widening Participation and Lifelong Learning*, 1(2), pp. 3-5.
- Davis, R. (2010) *The Gift of Dyslexia*. 3rd edn. London: Souvenir Press.
- Day, K. (2013) 'Coping with dyslexia', *Nursing Standard*, 28(4), pp. 74-74.
- Deakin, H. and Wakefield, K. (2014) 'Skype interviewing: reflections of two PhD researchers', *Qualitative Research*, 14(5), pp. 603-616.
- Dean, E. (2010) 'Enrolled nurses are disappearing, but is a replacement in the wings?', *Nursing Standard*, 24(39), pp. 12-13 2p.
- Dearnley, C. A. (2006) 'Knowing nursing and finding the professional voice: A study of enrolled nurses converting to first level registration', *Nurse Education Today*, 26(3), pp. 209-217.
- Deci, E. L. and Ryan, R. M. (2000) 'The 'What' and 'Why' of Goal Pursuits: Human Needs and the Self-Determination of Behavior', *Psychological Inquiry*, 11(4), pp. 227.
- Denzin, N. K. and Lincoln, Y. S. (2011) 'Introduction: The Discipline and Practice of Qualitative Research', in Denzin, N.K. & Lincoln, Y.S. (eds.) *Strategies of Qualitative Enquiry*. 4th ed. Thousand Oaks: SAGE.
- Department of Education and Employment (1999) *Learning to Succeed*. London: Her Majesties Stationary Office.
- Department of Health (1999) *Making a Difference: Strengthening the nursing, midwifery and health visiting contribution to health and healthcare*. London: Department of Health.
- Department of Health (2011) *Health Visitor Implementation Plan 2011-2015*. London: Department of Health.
- Disabled Students Sector Leadership Group (2017) 'Inclusive Teaching and Learning in Higher Education as a route to Excellence', Available: Department for Education. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/587221/Inclusive_Teaching_and_Learning_in_Higher_Education_as_a_route_to-excellence.pdf (Accessed 30th March 2017).
- Dominicé, P. (2000) *Learning from our lives: Using educational biographies with adults*. San Francisco: Jossey-Bass.
- Donelan, H. (2015) 'Social media for professional development and networking opportunities in academia', *Journal of Further and Higher Education*, pp. 1-24.
- Doyle, N. (2014) 'Supporting stressed staff', *Occupational Health*, 66(5), pp. 14-16.
- Duchscher, J. E. B. (2009) 'Transition shock: the initial stage of role adaptation for newly graduated Registered Nurses', *Journal of Advanced Nursing*, 65(5), pp. 1103-1113.
- Duncan, I., Yarwood-Ross, L. and Haigh, C. (2013) 'YouTube as a source of clinical skills education', *Nurse Education Today*, 33(12), pp. 1576-1580.

- Dweck, C. S. (2000) *Self-Theories; their role in motivation, personality and development*. New York: Psychology Press.
- Ecclestone, K., Biesta, G. and Hughes, M. (2009) *Transitions and Learning Through the Lifecourse*. Florence, KY, USA: Routledge.
- Edwards, R., Raggatt, P., Harrison, R., McCollum, A. and Calder, J. (1998) *Recent Thinking in Lifelong Learning*. Norwich: Her Majesty's Stationary Office.
- Elder, G. and Pellerin, L. (1998) 'Linking History and Human Lives.', in Giele, J.Z. & Elder, G.H. (eds.) *Methods of Life Course Research: Qualitative and Quantitative Approaches*. Thousand Oaks: SAGE.
- Elder, G. H. (1998) 'The life course as developmental theory', *Child Development*, 69(1), pp. 1.
- Elkjaer, B. (2003) 'Organizational learning with a pragmatic slant', *International Journal of Lifelong Education*, 22(5), pp. 481-494.
- Elkjaer, B. (2009) 'Pragmatism: a learning theory for the future', in Illeris, K. (ed.) *Contemporary theories of learning: Learning theorists ... In their own words*. Abingdon: Routledge.
- Elliott, J. G. and Gibbs, S. (2008) 'Does Dyslexia Exist?', *Journal of Philosophy of Education*, 42(3/4), pp. 475-491.
- Ellis, C. and Bochner, A. P. (2000) 'Autoethnography, Personal Narrative, Reflexivity', in Denzin, N.K. & Lincoln, Y.S. (eds.) *Handbook of Qualitative Research*. 2nd ed. Thousand Oaks: SAGE.
- Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen, K. and Kyngäs, H. (2014) 'Qualitative Content Analysis: A Focus on Trustworthiness', *Sage Open*, 4(1), pp. 1-10.
- Equality Act (2010) (c.15) London: HMSO. Available at: <http://www.legislation.gov.uk/ukpga/2010/15/contents>.
- Equality Challenge Unit (2010) *Managing reasonable adjustments in higher education* London: Equality Challenge Unit. Available at: <http://www.ecu.ac.uk/publications/managing-reasonable-adjustments-in-higher-education/> (Accessed: 30th March 2017).
- European Commission (2001) *Making a European Area of Lifelong Learning a Reality*. Brussels: European Commission, DG Education and Culture.
- Evans, W. (2014a) 'I am not a dyslexic person I'm a person with dyslexia': identity constructions of dyslexia among students in nurse education', *Journal of Advanced Nursing*, 70(2), pp. 360-372.
- Evans, W. (2014b) 'If they can't tell the difference between duphalac and digoxin you've got patient safety issues'. Nurse Lecturers' constructions of students' dyslexic identities in nurse education', *Nurse Education Today*, 34(6), pp. e41-6.
- Evans, W. (2015) 'Disclosing a dyslexic identity', *British Journal of Nursing*, 24(7), pp. 383-385.
- Everett, B. G., Rogers, R. G., Hummer, R. A. and Krueger, P. M. (2011) 'Trends in educational attainment by race/ethnicity, nativity, and sex in the United States, 1989–2005', *Ethnic and Racial Studies*, 34(9), pp. 1543-1566.
- Exley, S. (2003) 'The effectiveness of teaching strategies for students with dyslexia based on their preferred learning styles', *British Journal of Special Education*, 30(4), pp. 213-220.
- Faure, E., Herrera, F., Kaddoura, A., Lopes, H., Petrovsky, A. V., Rahnama, M. and Champion Ward, F. (1972) *Learning to Be: The world of education today and tomorrow*. Paris: UNESCO.
- Ferguson, C., Inglis, S. C., Newton, P. J., Cripps, P. J. S., Macdonald, P. S. and Davidson, P. M. (2014) 'Social media: A tool to spread information: A case study analysis of Twitter conversation at the Cardiac Society of Australia & New Zealand 61st Annual Scientific Meeting 2013', *Collegian*, 21(2), pp. 89-93.
- Field, J. (2012) 'Learning from our Lives', in Jarvis, P. & Watts, M. (eds.) *The Routledge International Handbook of Learning*. London: Routledge.

- Fitzgibbon, G. and O'Connor, B. (2002) *Adult Dyslexia: A Guide for the Workplace*. Chichester: John Wiley and Sons.
- Fleming, S., McKee, G. and Huntley-Moore, S. (2011) 'Undergraduate nursing students' learning styles: A longitudinal study', *Nurse Education Today*, 31(5), pp. 444-449.
- Fletcher, J. M. (2009) 'Dyslexia: The evolution of a scientific concept', *Journal of the International Neuropsychological Society*, 15(4), pp. 501-508.
- Flouri, E. (2006) 'Parental interest in children's education, children's self-esteem and locus of control, and later educational attainment: Twenty-six year follow-up of the 1970 British Birth Cohort', *British Journal of Educational Psychology*, 76(1), pp. 41-55.
- Foord, P. (2012) 'Degree-less nurses are being 'put out to pasture'', *Nursing Standard*, 27(9), pp. 28-28.
- Foster, I. (2008) 'Enhancing the learning experience of student radiographers with dyslexia', *Radiography*, 14(1), pp. 32-38.
- Fovet, F. 'Doing what we preach: examining the contradictions of the UDL discourse in faculties of education', *Presentation at AHEAD 2017 Conference*, Dublin. Available at: <https://www.youtube.com/watch?v=LxTvtcQHAYg> (Accessed 22nd April 2017).
- Fox, N. J. (2008) 'Postpositivism', in Given, L.M. (ed.) *The SAGE Encyclopedia of Qualitative Research Methods*. Thousand Oaks: SAGE.
- Francis-Wright, M. J. (2007) *Living with dyslexia: a phenomenological study of in-service part-time undergraduate occupational therapy students' experiences*. Doctorate of Education, University of East Anglia, Norwich.
- Francis, R. (2013) *Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry*, Norwich: The Stationery Office.
- Frederickson, N. and Jacobs, S. (2001) 'Controllability Attributions for Academic Performance and the Perceived Scholastic Competence, Global Self-Worth and Achievement of Children with Dyslexia', *School Psychology International*, 22(4), pp. 401-416.
- Fry, H., Ketteridge, S. and Marshall, S. (2014) *A Handbook for Teaching and Learning in Higher Education: Enhancing Academic Practice*. London: Routledge.
- Fuller, M., Bradley, A. and Healey, M. (2004a) 'Incorporating disabled students within an inclusive higher education environment', *Disability & Society*, 19(5), pp. 455-468.
- Fuller, M., Healey, M., Bradley, A. and Hall, T. (2004b) 'Barriers to learning: a systematic study of the experience of disabled students in one university', *Studies in Higher Education*, 29(3), pp. 303-318.
- Gardner, H. (2009) 'Multiple approaches to understanding', in Illeris, K. (ed.) *Contemporary theories of learning: Learning theorists ... In their own words*. Abingdon: Routledge.
- Garrison, J. (2009) 'Dewey's Constructivism: From the Reflex Arc Concept to Social Constructivism', in Hickman, L.A., Neubert, S. & Reich, K. (eds.) *John Dewey Between Pragmatism and Constructivism*. New York: Fordham University Press.
- Gerber, P. and Price, L. A. (2012) 'Self-Disclosure in Adults with Learning Disabilities and Dyslexia: Complexities and Considerations', in Brunswick, N. (ed.) *Supporting Dyslexic Adults in Higher Education and the Workplace*. Chichester: Wiley-Blackwell.
- Gibson, S. (2015) 'When rights are not enough: What is? Moving towards new pedagogy for inclusive education within UK universities', *International Journal of Inclusive Education*, 19(8), pp. 875-886.
- Gibson, S. and Kendall, L. (2010) 'Stories from school: dyslexia and learners' voices on factors impacting on achievement', *Support for Learning*, 25(4), pp. 187-193.
- Gillin, N. (2015) 'Legal, ethical and practical considerations in research involving nurses with dyslexia', *Nurse Researcher*, 23(1), pp. 21-25.
- Glazzard, J. (2010) 'The impact of dyslexia on pupils' self-esteem', *Support for Learning*, 25(2), pp. 63-69.

- Glazzard, J. and Dale, K. (2013) 'Trainee teachers with dyslexia: personal narratives of resilience', *Journal of Research in Special Educational Needs*, 13(1), pp. 26-37.
- Glogowska, M., Young, P. and Lockyer, L. (2011) 'Propriety, process and purpose: considerations of the use of the telephone interview method in an educational research study', *Higher Education*, 62(1), pp. 17-26.
- Goldberg, R. J., Higgins, E. L., Raskind, M. H. and Herman, K. L. (2003) 'Predictors of Success in Individuals with Learning Disabilities: A Qualitative Analysis of a 20-Year Longitudinal Study', *Learning Disabilities Research & Practice*, 18(4), pp. 222-236.
- Goldblatt, H., Karnieli-Miller, O. and Neumann, M. (2011) 'Sharing qualitative research findings with participants: Study experiences of methodological and ethical dilemmas', *Patient Education and Counseling*, 82(3), pp. 389-395.
- Gopee, N. (2015) *Mentoring and Supervision in Healthcare*. London: SAGE Publications.
- Gould, D., Drey, N. and Berridge, E. (2007) 'Nurses' experiences of continuing professional development', *Nurse Education Today*, 27(6), pp. 602-609.
- GOV.UK (2016a) *Access to Work*. Available at: <https://www.gov.uk/access-to-work> (Accessed: 3rd July 2016).
- GOV.UK (2016b) *Disabled Students' Allowances*. Available at: <https://www.gov.uk/disabled-students-allowances-dsas/eligibility> (Accessed: 3rd July 2016).
- Govranos, M. and Newton, J. M. (2014) 'Exploring ward nurses' perceptions of continuing education in clinical settings', *Nurse Education Today*, 34(4), pp. 655-660.
- Greatbatch, D. (2016) *A false economy*. London: Council of Deans of Health.
- Griffiths, S. (2012) 'Being dyslexic doesn't make me less of a teacher'. School placement experiences of student teachers with dyslexia: strengths, challenges and a model for support', *Journal of Research in Special Educational Needs*, 12(2), pp. 54-65.
- Gwernan-Jones, R. and Burden, R. L. (2010) 'Are they just lazy? Student teachers' attitudes about dyslexia', *Dyslexia (Chichester, England)*, 16(1), pp. 66-86.
- Hagens, V., Dobrow, M. J. and Chafe, R. (2009) 'Interviewee Transcript Review: assessing the impact on qualitative research', *BMC Medical Research Methodology*, 9, pp. 47-54.
- Halligan, P. and Howlin, F. (2016) *Supporting Nursing and Midwifery Students with a Disability in Clinical Practice: a resource guide*. Dublin: University College Dublin.
- Hanafin, J., Shevlin, M., Kenny, M. and Mc Neela, E. (2007) 'Including Young People with Disabilities: Assessment Challenges in Higher Education', *Higher Education: The International Journal of Higher Education and Educational Planning*, 54(3), pp. 435-448.
- Hanna, P. (2012) 'Using internet technologies (such as Skype) as a research medium: a research note', *Qualitative Research*, 12(2), pp. 239-242.
- Hargreaves, J., Dearnley, C., Walker, S. and Walker, L. (2013) 'The preparation and practice of disabled health care practitioners: exploring the issues', *Innovations in Education and Teaching International*, 51(3), pp. 303-314.
- Hargreaves, J. and Walker, L. (2014) 'Preparing disabled students for professional practice: managing risk through a principles-based approach', *Journal of Advanced Nursing*, 70(8), pp. 1748-1757.
- Harriss, A. and Ricketts, K. (2009) 'Dealing with dyslexia', *Occupational Health*, 61(11), pp. 18-20.
- Hart, C. (1998) *Doing a Literature Review; releasing the social science research imagination*. London: SAGE.
- Haywood, H., Pain, H., Ryan, S. and Adams, J. (2012) 'Engagement with Continuing Professional Development', *Journal of Allied Health*, 41(2), pp. 83-89.
- Healey, M., Fuller, M., Bradley, A. and Hall, T. (2006) 'Listening to Students: the experience of disabled students of learning at university', in Adams, M. & Brown, S. (eds.) *Towards Inclusive Learning in Higher Education: Developing Curricula for Disabled Students*. London: Routledge Falmer.

- Heelan, A. 2013. Universal Design: A threshold concept. *Paper presented at AHEAD Summer School for Professionals Teaching Students with Disabilities in Healthcare Disciplines*. Dublin: University College Dublin.
- Heelan, A., Halligan, P. and Quirke, M. (2015) 'Universal Design for Learning and Its Application to Clinical Placements in Health Science Courses (Practice Brief)', *Journal of Postsecondary Education & Disability*, 28(4), pp. 469-479.
- Heinz, M. (2015) 'Why choose teaching? An international review of empirical studies exploring student teachers' career motivations and levels of commitment to teaching', *Educational Research and Evaluation*, 21(3), pp. 258-297.
- Hellawell, D. (2006) 'Inside-Out: Analysis of the Insider-Outsider Concept as a Heuristic Device to Develop Reflexivity in Students Doing Qualitative Research', *Teaching in Higher Education*, 11(4), pp. 483-494.
- Henderson, M., Johnson, N. F. and Auld, G. (2013) 'Silences of ethical practice: dilemmas for researchers using social media', *Educational Research and Evaluation*, 19(6), pp. 546-560.
- Higher Education Statistics Agency (2016) *Students, qualifiers and staff data tables*. Available at: <https://www.hesa.ac.uk/content/view/1973/239/> (Accessed: 6th August 2016).
- Hitch, D., Macfarlane, S. and Nihill, C. (2015) 'Inclusive pedagogy in Australian universities: A review of current policies and professional development activities', *The International Journal of the First Year in Higher Education; Vol 6 No 1 (2015): Vol 6 No 1 (2015)*.
- Hjemdal, O., Friberg, O. and Stiles, T. C. (2012) 'Resilience is a good predictor of hopelessness even after accounting for stressful life events, mood and personality (NEO-PI-R)', *Scandinavian Journal of Psychology*, 53(2), pp. 174-180.
- Hockings, C. (2010) 'Inclusive learning and teaching in higher education: a synthesis of research', *Evidence Net*, Available: Higher Education Academy. Available at: https://www.heacademy.ac.uk/resources/detail/resources/detail/evidencenet/Inclusive_learning_and_teaching_in_higher_education (Accessed 30th March 2017).
- Hollingsworth, S. and Dybdahl, M. (2007) 'Talking to Learn: The Critical Role of Conversation in Narrative Inquiry.', in Clandinin, D.J. (ed.) *Handbook of Narrative Inquiry: Mapping a Methodology*. Thousand Oaks: SAGE.
- Holloway, S. (2001) 'The Experience of Higher Education from the Perspective of Disabled Students', *Disability & Society*, 16(4), pp. 597-615.
- Howkanson Hawks, J. (1992) 'Empowerment in nursing education: concept analysis and application to philosophy, learning and instruction', *Journal of Advanced Nursing*, 17(5), pp. 609-618.
- Howlin, F., Halligan, P. and O'Toole, S. (2014) 'Evaluation of a clinical needs assessment and exploration of the associated supports for students with a disability in clinical practice: Part 2', *Nurse Education in Practice*, 14(5), pp. 565-572.
- Hughes, E. (2005) 'Nurses' perceptions of continuing professional development', *Nursing Standard*, 19(43), pp. 41-49.
- Humphrey, N. and Mullins, P. M. (2002) 'Personal Constructs and Attribution for Academic Success and Failure in Dyslexia', *British Journal of Special Education*, 29(4), pp. 196-203.
- Hurst, A. (1992) 'Widening participation in higher education and people with disabilities', *Personnel Review*, 21(6), pp. 19-36.
- Ikematsu, Y., Mizutani, M., Tozaka, H., Mori, S., Egawa, K., Endo, M. and Yokouchi, M. (2014) 'Nursing students with special educational needs in Japan', *Nurse Education in Practice*, 14(6), pp. 674-679.
- Illeris, K. (2009a) 'A comprehensive understanding of human learning', in Illeris, K. (ed.) *Contemporary Theories of Learning*. Abingdon: Routledge.

- Illeris, K. (2009b) *Contemporary theories of learning: learning theorists in their own words*. Abingdon: Routledge.
- Illingworth, K. (2005) 'The effects of dyslexia on the work of nurses and healthcare assistants', *Nursing Standard (Royal College Of Nursing (Great Britain): 1987)*, 19(38), pp. 41-48.
- Jamieson, C. and Morgan, E. (2008) *Managing dyslexia at university*. Abingdon: Routledge.
- Jarvis, P. (2005) 'Lifelong education and its relevance to nursing', *Nurse Education Today*, 25(8), pp. 655-660.
- Jarvis, P. (2006) *Towards a Comprehensive Theory of Human Learning*. Abingdon: Routledge.
- Jarvis, P. and Cook, I. (2010) *Adult education and lifelong learning: Theory and practice*. 4 edn. Abingdon: Routledge.
- Jasper, M. and Mooney, G. (2013) 'The Context of Professional Practice', in Jasper, M., Rosser, M. & Mooney, G. (eds.) *Professional Development, Reflection and Decision-Making in Nursing and Health Care*. Chichester: Wiley-Blackwell.
- Jelfs, A. and Richardson, J. T. E. (2010) 'Perceptions of academic quality and approaches to studying among disabled and nondisabled students in distance education', *Studies in Higher Education*, 35(5), pp. 593-607.
- Johnson, J. (2015) *House of Commons Written Statements 2nd December 2015*. London: Parliament.uk. Available at: <http://www.publications.parliament.uk/pa/cm201516/cmhansrd/cm151202/wmsindx/151202-x.htm> (Accessed: 21st February 2016).
- Jones, M. L. (2007) 'Using software to analyse qualitative data', *Malaysian Journal of Qualitative Research*, 1(1), pp. 64-76.
- Joyce, P. and Cowman, S. (2007) 'Continuing professional development: investment or expectation?', *Journal Of Nursing Management*, 15(6), pp. 626-633.
- Kasper, C. (1995) 'Pragmatism: the problem with the bottom line', in Omery, A., Kasper, C. & Page, G. (eds.) *In search of nursing science*. Thousand Oaks: SAGE.
- Kayama, M. (2010) 'Parental experiences of children's disabilities and special education in the United States and Japan: implications for school social work', *Social Work*, 55(2), pp. 117-125.
- Kenny, A. J. (2005) 'Interaction in cyberspace: an online focus group', *Journal of Advanced Nursing*, 49(4), pp. 414-422.
- Khatri, C., Chapman, S. J., Glasbey, J., Kelly, M., Nepogodiev, D., Bhangu, A., Fitzgerald, J. E. and on behalf of the, S. C. (2015) 'Social Media and Internet Driven Study Recruitment: Evaluating a New Model for Promoting Collaborator Engagement and Participation', *PLoS ONE*, 10(3), pp. e0118899.
- Kibby, M. Y. and Cohen, M. J. (2008) 'Memory Functioning in Children with Reading Disabilities and/or Attention Deficit/Hyperactivity Disorder: A Clinical Investigation of their Working Memory and Long-Term Memory Functioning', *Child Neuropsychology*, 14(6), pp. 525-546.
- King, N. (2012) 'Doing Template Analysis', in Cassell, C. & Symon, G. (eds.) *Qualitative Organizational Research: Core Methods and Current Challenges*. Kindle ed. London: SAGE.
- King, N. and Horrocks, C. (2010) *Interviews in qualitative research*. London: SAGE.
- Kirby, J. R., Silvestri, R., Allingham, B. H., Parrila, R. and La Fave, C. B. (2008) 'Learning Strategies and Study Approaches of Postsecondary Students With Dyslexia', *Journal of Learning Disabilities*, 41(1), pp. 85-96.
- Knapper, C. K. and Cropley, A. J. (2000) *Lifelong Learning in Higher Education*. 3rd edn. London: Kogan Page.
- Knowles, M. S., Holton, E. F. and Swanson, R. A. (2012) *The Adult Learner: the definitive classic in adult education and human resource development*. 7th edn. Abingdon: Routledge.

- Kolanko, K. M. (2003) 'A Collective Case Study of Nursing Students with Learning Disabilities', *Nursing Education Perspectives*, pp. 251-256.
- Kong, S. Y. (2012) 'The emotional impact of being recently diagnosed with dyslexia from the perspective of chiropractic students', *Journal of Further & Higher Education*, 36(1), pp. 127-146.
- Laal, M. (2012) 'Benefits of Lifelong Learning', *Procedia - Social and Behavioral Sciences*, 46, pp. 4268-4272.
- Lave, J. (2009) 'The practice of learning', in Illeris, K. (ed.) *Contemporary theories of learning: Learning theorists ... In their own words*. Abingdon: Routledge.
- Lawrence, D. (2006) 'What is self-esteem?', in Lawrence, D. (ed.) *Enhancing self-esteem in the classroom*. 3rd ed. London: SAGE.
- Leather, C., Hogg, H., Seiss, E. and Everatt, J. (2011) 'Cognitive Functioning and Work Success in Adults with Dyslexia', *Dyslexia* (10769242), 17(4), pp. 327-338.
- Levey, J. A. (2016a) 'Measuring Nurse Educators' Willingness to Adopt Inclusive Teaching Strategies', *Nursing Education Perspectives*, 37(4), pp. 215-220.
- Levey, J. A. 'Universal Design for Instruction as a Catalyst for Transforming Nursing Education', *2016 Nursing Education Research Conference*, Washington DC, 8th-9th April 2016.
- Light, G., Cox, R. L. and Calkins, S. C. (2009) *Learning and Teaching in Higher Education: The Reflective Professional*. 2 edn. London: SAGE Publications.
- Lincoln, Y. S. (1995) 'Emerging Criteria for Quality in Qualitative and Interpretive Research', *Qualitative Inquiry*, 1(3), pp. 275-289.
- Lincoln, Y. S., Lynham, S. A. and Guba, E. G. (2013) 'Paradigmatic Controversies, Contradictions, and Emerging Confluences, Revisited', in Denzin, N.K. & Lincoln, Y.S. (eds.) *The Landscape of Qualitative Research*. 4th ed. Thousand Oaks: SAGE.
- Locke, R., Scallan, S., Mann, R. and Alexander, G. (2015) 'Clinicians with dyslexia: a systematic review of effects and strategies', *The Clinical Teacher*, 12(6), pp. 394-398.
- Lombardi, A. R. and Murray, C. (2011) 'Measuring university faculty attitudes toward disability: willingness to accommodate and adopt universal design principles', *Journal of Vocational Rehabilitation*, 34(1), pp. 43-56.
- Lombardi, A. R., Murray, C. and Gerdes, H. (2011) 'College faculty and inclusive instruction: Self-reported attitudes and actions pertaining to Universal Design', *Journal of Diversity in Higher Education*, 4(4), pp. 250-261.
- López Gavira, R. and Moriña, A. (2015) 'Hidden voices in higher education: inclusive policies and practices in social science and law classrooms', *International Journal of Inclusive Education*, 19(4), pp. 365-378.
- Macdonald, S. J. (2010) 'Towards a social reality of dyslexia', *British Journal of Learning Disabilities*, 38(4), pp. 271-279.
- Magnus, E. and Tøssebro, J. (2014) 'Negotiating individual accommodation in higher education', *Scandinavian Journal of Disability Research*, 16(4), pp. 316-332.
- Marsh, H. W. and Martin, A. J. (2011) 'Academic self-concept and academic achievement: Relations and causal ordering', *British Journal of Educational Psychology*, 81(1), pp. 59-77.
- Maslin-Prothero, S. E. (2013) 'Changing the landscape for nursing and healthcare education: Evidence-based innovation, policy and practice', *Nurse Education Today*, 33(7), pp. 699-700.
- Masterton, H. (2010) 'The SENDA Agenda: The Vision for Inclusive Higher Education', *At the Interface / Probing the Boundaries*, 60, pp. 211-225.
- Mather, N. and Wendling, B. (2012) *Essentials of dyslexia assessment and intervention*. Hoboken: John Wiley and Sons.

- McAdams, D. P. (2008) 'Personal Narratives and the Life Story', in John, O.P., Robin, R.W. & Pervin, L.A. (eds.) *Handbook of Personality: theory and research*. 3rd ed. New York: The Guilford Press.
- McCabe, C. and Timmins, F. (2013) *Communication skills for nursing practice*. Basingstoke: Palgrave Macmillan.
- McCormack, C. (2000a) 'From Interview Transcript to Interpretive Story: Part 1—Viewing the Transcript through Multiple Lenses', *Field Methods*, 12(4), pp. 282-297.
- McCormack, C. (2000b) 'From Interview Transcript to Interpretive Story: Part 2— Developing an Interpretive Story', *Field Methods*, 12(4), pp. 298-315.
- McCormack, C. (2004) 'Storying stories: a narrative approach to in-depth interview conversations', *International Journal Of Social Research Methodology*, 7, pp. 219-236.
- McDaniel, A., DiPrete, T., Buchmann, C. and Shwed, U. (2011) 'The Black Gender Gap in Educational Attainment: Historical Trends and Racial Comparisons', *Demography*, 48(3), pp. 889-914.
- McElhinney, E., Cheater, F. M. and Kidd, L. (2014) 'Undertaking qualitative health research in social virtual worlds', *Journal of Advanced Nursing*, 70(6), pp. 1267-1275.
- McIntosh, A. (2011) 'Humanist learning theories', in McIntosh, A., Gidman, J. & Mason Whitehead, E. (eds.) *Key Concepts in Healthcare Education*. London: SAGE.
- McKendree, J. and Snowling, M. J. (2011) 'Examination results of medical students with dyslexia', *Medical Education*, 45(2), pp. 176-182.
- McLafferty, E. and Farley, A. (2006) 'Analysing qualitative research data using computer software', *Nursing Times*, 102(24), pp. 34-36.
- McLoughlin, D. and Leather, C. (2012) *The dyslexic adult: Interventions and outcomes - an evidence-based approach*. 2 edn. Oxford: John Wiley & Sons.
- McNulty, M. A. (2003) 'Dyslexia and the Life Course', *Journal of Learning Disabilities*, 36(4), pp. 363.
- McPheat, C. (2014) 'Experience of nursing students with dyslexia on clinical placement', *Nursing Standard*, 28(41), pp. 44-49.
- Mealer, M. and Jones, J. (2014) 'Methodological and ethical issues related to qualitative telephone interviews on sensitive topics', *Nurse Researcher*, 21(4), pp. 32-37.
- Mero-Jaffe, I. (2011) 'Is that what I said?' Interview Transcript Approval by Participants: An Aspect of Ethics in Qualitative Research', *International Journal of Qualitative Methods*, 10(3), pp. 231-247.
- Mertens, D. M. (2010) 'An Introduction to Research', in *Research and Evaluation in Education and Psychology* [Online]. Version. Available at: http://www.sagepub.com/upm-data/29985_Chapter1.pdf (Accessed: 30th May 2014).
- Mertons, D. M. and McLaughlin (2005) 'Mixed Methods and Mixed Model Designs.', in Mertons, D.M. & McLaughlin (eds.) *Research and Evaluation Methods in Special Education*. Thousand Oaks: SAGE.
- Miller, S., Ross, S. and Cleland, J. (2009) 'Medical students' attitudes towards disability and support for disability in medicine', *Medical Teacher*, 31(6), pp. 556-561.
- Millward, L. J., Bryan, K., Everatt, J. and Collins, R. (2005) 'Clinicians and dyslexia--a computer-based assessment of one of the key cognitive skills involved in drug administration', *International Journal Of Nursing Studies*, 42(3), pp. 341-353.
- Mokoena, S. (2013) 'Engagement with and participation in online discussion forums', *Turkish Online Journal of Educational Technology*, 12(2), pp. 97-105.
- Mole, H. (2013) 'A US model for inclusion of disabled students in higher education settings: The social model of disability and Universal Design', *Widening Participation and Lifelong Learning*, 14(3), pp. 62-86.

- Moody, S. (2009) *Dyslexia and employment: A guide for assessors, trainers and managers*. Malden, MA: Wiley-Blackwell.
- Moorley, C. R. and Chinn, T. (2014) 'Nursing and Twitter: Creating an online community using hashtags', *Collegian*, 21(2), pp. 103-109.
- Morgado, B., Cortés-Vega, M. D., López-Gavira, R., Álvarez, E. and Moriña, A. (2016) 'Inclusive education in higher education?', *Journal of Research in Special Educational Needs*, 16, pp. 639-642.
- Moriña, A. (2017) 'Inclusive education in higher education: challenges and opportunities', *European Journal of Special Needs Education*, 32(1), pp. 3-17.
- Moriña, A., Cortés-Vega, M. D. and Molina, V. M. (2015) 'Faculty training: an unavoidable requirement for approaching more inclusive university classrooms', *Teaching in Higher Education*, 20(8), pp. 795-806.
- Morris, D. and Turnbull, P. (2006) 'Clinical experiences of students with dyslexia', *Journal of Advanced Nursing*, 54(2), pp. 238-247.
- Morris, D. and Turnbull, P. (2007a) 'The disclosure of dyslexia in clinical practice: experiences of student nurses in the United Kingdom', *Nurse Education Today*, 27(1), pp. 35-42.
- Morris, D. and Turnbull, P. (2007b) 'A survey-based exploration of the impact of dyslexia on career progression of UK registered nurses', *Journal Of Nursing Management*, 15(1), pp. 97-106.
- Mortimore, T. (2005) 'Dyslexia and learning style – a note of caution', *British Journal of Special Education*, 32(3), pp. 145-148.
- Mortimore, T. (2008) *Dyslexia and Learning Style: a Practitioner's Handbook*. 2nd edn. Chichester: John Wiley and Sons.
- Mortimore, T. (2013) 'Dyslexia in higher education: creating a fully inclusive institution', *Journal of Research in Special Educational Needs*, 13(1), pp. 38-47.
- Moss, B. (2012) *Communication skills in health and social care*. 2nd edn. London: SAGE.
- Murphy, F. (2009) 'The clinical experiences of dyslexic healthcare students', *Radiography*, 15(4), pp. 341-344.
- Murphy, F. (2011) 'On being dyslexic: Student radiographers' perspectives', *Radiography*, 17(2), pp. 132-138.
- Nalavany, B. A. and Carawan, L. W. (2012) 'Perceived Family Support and Self-Esteem: The Mediatonal Role of Emotional Experience in Adults with Dyslexia', *Dyslexia* (10769242), 18(1), pp. 58-74.
- Nalavany, B. A., Carawan, L. W. and Sauber, S. (2015) 'Adults with Dyslexia, an Invisible Disability: The Mediatonal Role of Concealment on Perceived Family Support and Self-Esteem', *British Journal of Social Work*, 45(2), pp. 568-586.
- National Working Party on Dyslexia in Higher Education (1999) *Dyslexia in Higher Education: policy, provision and practice*. Hull: National Working Party on Dyslexia in Higher Education.
- NHS Improvement (2016) *Evidence from NHS Improvement on clinical staff shortages: A workforce analysis*. London: NHS Improvement.
- Nichols, S. (2012) 'Screening for Specific Learning Difficulties in Higher Education', in Brunswick, N. (ed.) *Supporting Dyslexic Adults in Higher Education and the Workplace*. Chichester: Wiley-Blackwell.
- Nichols, S. A., McLeod, J. S., Holder, R. L. and McLeod, H. S. T. (2009) 'Screening for dyslexia, dyspraxia and Meares-Irlen syndrome in higher education', *Dyslexia* (10769242), 15(1), pp. 42-60.
- Nicoll, K. and Fejes, A. (2011) 'Lifelong Learning: A Pacification of 'Know How'', *Studies in Philosophy & Education*, 30(4), pp. 403-417.
- Nightingale, F. (1860) *Notes on Nursing: what it is and what it is not*. London: Harrison.

- Nolan, C., Gleeson, C., Treanor, D. and Madigan, S. (2014) 'Higher education students registered with disability services and practice educators: issues and concerns for professional placements', *International Journal of Inclusive Education*, pp. 1-16.
- Norris, E. (2015) 'Remoteness and rapport', *Psychologist*, 28(5), pp. 422-422.
- Nursing and Midwifery Council (2007) *Standards for Medicines Management*. London: Nursing and Midwifery Council.
- Nursing and Midwifery Council (2010a) *Reasonable adjustments*. Available at: <http://www.nmc-uk.org/Students/Good-Health-and-Good-Character-for-students-nurses-and-midwives/Reasonable-adjustments/> (Accessed: 1st January 2015 2015).
- Nursing and Midwifery Council (2010b) *Standards for pre-registration nurse education*. London: Nursing and Midwifery Council.
- Nursing and Midwifery Council (2012a) *Additional details: extra details regarding SLAiP*. Available at: <http://www.nmc-uk.org/Educators/Standards-for-education/Standards-to-support-learning-and-assessment-in-practice/Standards-to-support-learning-and-assessment-in-practice-settings-SLAiP/Additional-Details/> (Accessed: 19th September 2013).
- Nursing and Midwifery Council (2012b) *Clarification of admission criteria for nurses to Specialist Community Public Health Nurse programmes*. London: Nursing and Midwifery Council.
- Nursing and Midwifery Council (2012c) *Standards for pre-registration midwifery education*. London: Nursing and Midwifery Council.
- Nursing and Midwifery Council (2015a) *The Code: professional standards of practice and behaviour for nurses and midwives*. London: Nursing and Midwifery Council.
- Nursing and Midwifery Council (2015b) *Guidance on using social media responsibly*. London: Nursing and Midwifery Council.
- Nursing and Midwifery Council (2015c) *How to revalidate with the NMC; requirements for renewing your registration*. London: Nursing and Midwifery Council.
- Nursing and Midwifery Council (2015d) *Nursing and Midwifery Council Annual Fitness to Practice Report 2014–2015* London: Nursing and Midwifery Council. Available at: https://www.nmc.org.uk/globalassets/sitedocuments/annual_reports_and_accounts/ftannualreports/annual-ftp-report-print-2014-15.pdf?_t_id=1B2M2Y8AsgTpgAmY7PhCf%3d%3d&_t_q=referrals+competence&_t_tag=s=language%3aen%2csiteid%3ad6891695-0234-463b-bf74-1bfb02644b38&_t_ip=78.111.197.229&_t_hit.id=NMC_Web_Models_Media_Document_File/_1be01df3-54d0-46c1-9687-62d53fe26215&_t_hit.pos=8 (Accessed: 29th February 2016).
- Nursing and Midwifery Council (2016) *Search results*. Available at: <https://www.nmc.org.uk/search/?q=dyslexia&sortBy=NoFilter> (Accessed: 29th February 2016).
- Nursing and Midwifery Council (2017) 'Draft Education Framework: standards for education and training', (24th May 2017), Available: Nursing and Midwifery Council. Available at: <https://www.nmc.org.uk/globalassets/sitedocuments/councilpapersanddocuments/council-2017/council-item-7-may-2017.pdf> (Accessed 26th May 2017).
- O'Connor, A., Jackson, L., Goldsmith, L. and Skirton, H. (2014) 'Can I get a retweet please? Health research recruitment and the Twittersphere', *Journal of Advanced Nursing*, 70(3), pp. 599-609.
- O'Grady, A. (2013) *Lifelong Learning in the UK: An introductory guide for Education Studies*. London: Routledge.
- O'Reilly, M. and Kiyimba, N. (2015) *Advanced Qualitative Research: a guide to using theory*. London: SAGE.

- Oliver, M. and Barnes, C. (2010) 'Disability studies, disabled people and the struggle for inclusion', *British Journal of Sociology of Education*, 31(5), pp. 547-560.
- Organisation for Economic Cooperation Development (1996) *Lifelong learning for all: Meeting of the education committee at ministerial level, 16-17 January 1996*. Paris: Organization for Economic Co-operation and Development (OECD).
- Orr, A. C. and Hammig, S. B. (2009) 'Inclusive postsecondary strategies for teaching students with learning disabilities: a review of the literature', *Learning Disability Quarterly*, 32(3), pp. 181-196.
- Parahoo, K. (2006) *Nursing Research: Principles, Process and Issues*. 2nd edn. Basingstoke: Palgrave MacMillan.
- Pasupathi, M., McLean, K. C. and Weeks, T. (2009) 'To Tell or Not to Tell: Disclosure and the Narrative Self', *Journal of Personality*, 77(1), pp. 89-124.
- Patel, A. (2015) *10 Twitter tactics to increase your engagement*: Social Media Examiner. Available at: <http://www.socialmediaexaminer.com/twitter-tactics-to-increase-engagement/> (Accessed: 30th August 2015).
- Pavey, B., Meehan, M. and Waugh, A. (2010) *Dyslexia-Friendly Further and Higher Education*. London: SAGE.
- Pleasance, S. (2016) *Wider professional practice in education and training*. London: SAGE.
- Pliner, S. M. and Johnson, J. R. (2004) 'Historical, Theoretical, and Foundational Principles of Universal Instructional Design in Higher Education', *Equity & Excellence in Education*, 37(2), pp. 105-113.
- Pollak, D. (2002) *Dyslexia, the self and higher education: learning life histories of students identified as dyslexic*. Doctor of Philosophy, De Montford University, Leicester.
- Pollak, D. (2005) *Dyslexia, the self and Higher Education*. Stoke on Trent: Trentham Books.
- Pollard, A. (2003) 'Learning through life - higher education and the lifecourse of individuals', in Slowey, M. & Watson, D. (eds.) *Higher Education and the Lifecourse*. Maidenhead: Society for Research into Higher Education and the Open University Press.
- Ponto, M. (2004) *Locus of Control, an exploration of the nursing students' view of control, autonomy and satisfaction*. Doctor of Philosophy, Southbank University, London.
- Ponto, M., Ooms, A. and Cowieson, F. (2014) 'Learning styles and Locus of control in undergraduate medical, nursing and physiotherapy students: a comparative study', *Progress in Health Sciences*, 4(1), pp. 172-178.
- Poore, J. A., Cullen, D. L. and Schaar, G. L. (2014) 'Simulation-Based Interprofessional Education Guided by Kolb's Experiential Learning Theory', *Clinical Simulation in Nursing*, 10(5), pp. e241-e247.
- Price, G. A. and Gale, A. (2006) 'How Do Dyslexic Nursing Students Cope with Clinical Practice Placements? The Impact of the Dyslexic Profile on the Clinical Practice of Dyslexic Nursing Students: Pedagogical Issues and Considerations', *Learning Disabilities -- A Contemporary Journal*, 4(1), pp. 19-36.
- Prowse, S. (2009) 'Institutional construction of disabled students', *Journal of Higher Education Policy & Management*, 31(1), pp. 89-96.
- Purdy, M. (1997) 'Humanist ideology and nurse education. 2. Limitations of humanist educational theory in nurse education', *Nurse Education Today*, 17(3), pp. 196-202.
- Putnam, R. A. (2010) 'Dewey's epistemology', in Cochran, M. (ed.) *The Cambridge Companion to Dewey*: Cambridge University Press.
- Qin, S., Hermans, E. J., van Marle, H. J. F., Luo, J. and Fernández, G. (2009) 'Acute Psychological Stress Reduces Working Memory-Related Activity in the Dorsolateral Prefrontal Cortex', *Biological Psychiatry*, 66(1), pp. 25-32.
- Quach, S., Pereira, J. A., Russell, M. L., Wormsbecker, A. E., Ramsay, H., Crowe, L., Quan, S. D. and Kwong, J. (2013) 'The Good, Bad, and Ugly of Online Recruitment of Parents for

- Health-Related Focus Groups: Lessons Learned', *Journal of Medical Internet Research*, 15(11), pp. e250.
- Rankin, E. R., Nayda, R., Cocks, S. and Smith, M. (2009) 'Students with disabilities and clinical placement: understanding the perspective of healthcare organisations', *International Journal of Inclusive Education*, 14(5), pp. 533-542.
- Rao, K., Ok, M. W. and Bryant, B. R. (2014) 'A Review of Research on Universal Design Educational Models', *Remedial and Special Education*, 35(3), pp. 153-166.
- Rassool, G. H. and Rawaf, S. (2008) 'The influence of learning styles preference of undergraduate nursing students on educational outcomes in substance use education', *Nurse Education in Practice*, 8(5), pp. 306-314.
- Redpath, J., Kearney, P., Nicholl, P., Mulvenna, M., Wallace, J. and Martin, S. (2013) 'A qualitative study of the lived experiences of disabled post-transition students in higher education institutions in Northern Ireland', *Studies in Higher Education*, 38(9), pp. 1334-1350.
- Reid, G. (2009) *Dyslexia: a Practitioners Handbook*. 4th edn. Chichester: Wiley-Blackwell.
- Reid, G., Came, F. and Price, L. (2008) 'Dyslexia: Workplace Issues', in Reid, G., Fawcett, A.J., Manis, F. & Siegel, L. (eds.) *The SAGE Handbook of Dyslexia*. London: SAGE.
- Reid, G. and Strnadova, I. (2008) 'Dyslexia and Learning Styles: Overcoming the Barriers to Learning', in Reid, G., Fawcett, A.J., Manis, F. & Siegel, L. (eds.) *The SAGE Handbook of Dyslexia*. London: SAGE.
- Reindal, S. M. (2016) 'Discussing inclusive education: an inquiry into different interpretations and a search for ethical aspects of inclusion using the capabilities approach', *European Journal of Special Needs Education*, 31(1), pp. 1-12.
- Rice, M. and Brooks, G. (2004) *Developmental Dyslexia in adults: a research review*. London: National Research and Development Centre for adult literacy and numeracy.
- Richardson, J. T. E. (2008) 'The attainment of ethnic minority students in UK higher education', *Studies in Higher Education*, 33(1), pp. 33-48.
- Ricketts, C., Brice, J. and Coombes, L. (2010) 'Are Multiple Choice Tests Fair to Medical Students with Specific Learning Disabilities?', *Advances in Health Sciences Education*, 15(2), pp. 265-275.
- Rickinson, M. (2010) *Disability equality in higher education: a synthesis of research* York: Higher Education Academy Action on Access. Available at: http://www.heacademy.ac.uk/assets/EvidenceNet/Syntheses/disability_equality_in_he_synthesis.pdf (Accessed: 6th June 2013).
- Riddell, S. and Weedon, E. (2006) 'What Counts as a Reasonable Adjustment? Dyslexic Students and the Concept of Fair Assessment', *International Studies in Sociology of Education*, 16(1), pp. 57-73.
- Riddell, S. and Weedon, E. (2009) 'The idea of fitness to practise', in Fuller, M., Georgeson, J., Healey, M., Hurst, A., Kelly, K., Riddell, S., Roberts, H. & Weedon, E. (eds.) *Improving Disabled Students' Learning*. Abingdon: Routledge.
- Riddell, S. and Weedon, E. (2014) 'Disabled students in higher education: Discourses of disability and the negotiation of identity', *International Journal of Educational Research*, 63, pp. 38-46.
- Riddick, B. (2000) 'An Examination of the Relationship Between Labelling and Stigmatisation with Special Reference to Dyslexia', *Disability & Society*, 15(4), pp. 653-667.
- Riddick, B. and English, E. (2006) 'Meeting the standards? Dyslexic students and the selection process for initial teacher training', *European Journal of Teacher Education*, 29(2), pp. 203-222.
- Ridley, C. (2011) 'The experiences of nursing students with dyslexia', *Nursing Standard*, 25(24), pp. 35-42.
- Riessman, C. K. (2008) *Narrative Methods for the Human Sciences*. Thousand Oaks: SAGE.

- Roberts, H. (2009) 'Listening to disabled students on teaching, learning and assessment', in Fuller, M., Georgeson, J., Healey, M., Hurst, A., Kelly, K., Riddell, S., Roberts, H. & Weedon, E. (eds.) *Improving Disabled Students' Learning: experiences and outcomes*. Abingdon: Routledge.
- Roberts, S. (2010) 'Reflection on life experience as an aid to deeper learning', *Nursing Older People*, 22(10), pp. 33-37.
- Rose, J. (2009) *Understanding and Teaching Children and Young People with Dyslexia and Literacy Difficulties* Annesley: DCSF Publications. Available at: <http://webarchive.nationalarchives.gov.uk/20130401151715/https://www.education.gov.uk/publications/eOrderingDownload/00659-2009DOM-EN.pdf>.
- ROSPA (2010) 'Toolkit to support healthcare staff with dyslexia', *RoSPA Occupational Safety & Health Journal*, 40(9), pp. 5-5.
- Roulston, K. (2014) 'Analysing Interviews', in Flick, U. (ed.) *The Sage Handbook of Qualitative of Data Analysis*. London: SAGE.
- Royal College of Nursing (2014) *An uncertain future: The UK nursing labour market review 2014*. London: Royal College of Nursing.
- Royal College of Nursing Practice Education Forum (2007) *Guidance for mentors of nursing students and midwives: An RCN toolkit*. London: Royal College of Nursing.
- Ryley, N. and Middleton, C. (2015) 'Framework for advanced nursing, midwifery and allied health professional practice in Wales: the implementation process', *Journal of Nursing Management*, 23(4), pp. 1-7.
- Sanderson-Mann, J. (2006) 'Understanding dyslexia and nurse education in the clinical setting', *Nurse Education in Practice*, 6(3), pp. 127-133.
- Sanderson-Mann, J., J Wharrad, H. and McCandless, F. (2012) 'An empirical exploration of the impact of dyslexia on placement-based learning, and a comparison with non-dyslexic students', *Diversity & Equality in Health & Care*, 9(2), pp. 89-99.
- Sanderson-Mann, J. and McCandless, F. (2005) 'Guidelines to the United Kingdom Disability Discrimination Act (DDA) 1995 and the Special Educational Needs and Disability Act (SENDA) 2001 with regard to nurse education and dyslexia', *Nurse Education Today*, 25(7), pp. 542-549.
- Scott, S. S., McGuire, J. M. and Shaw, S. F. (2003) 'Universal Design for Instruction', *Remedial & Special Education*, 24(6), pp. 369-379.
- Seitz, S. (2015) 'Pixilated partnerships, overcoming obstacles in qualitative interviews via Skype: a research note', *Qualitative Research*.
- Sibona, C. and Walczak, S. 'Purposive Sampling on Twitter: A Case Study'. *System Science (HICSS), 2012 45th Hawaii International Conference on*, 4-7 Jan. 2012, 3510-3519.
- Siegel, L. S. and Smythe, I. S. (2006) 'Supporting dyslexic adults—a need for clarity (and more research): a critical review of the rice report 'Developmental dyslexia in adults: a research review'', *Dyslexia*, 12(1), pp. 68-79.
- Sikes, P. and Gale, K. (2006) 'Narrative Approaches to educational research', Available: University of Plymouth. Available at: <http://www.edu.plymouth.ac.uk/resined/narrative/narrativehome.htm> (Accessed 21st May 2013).
- Singleton, C., Horne, J. and Simmons, F. (2009) 'Computerised screening for dyslexia in adults', *Journal of Research in Reading*, 32(1), pp. 137-152.
- Smith, F. G. (2012) 'Analyzing a college course that adheres to the Universal Design for Learning (UDL) framework', *Journal of the Scholarship of Teaching & Learning*, 12(3), pp. 31-61.
- Social Mobility Advisory Group (2016) *Working in partnership: enabling social mobility in higher education* London: Universities UK. Available at: <http://www.universitiesuk.ac.uk/policy->

- and-analysis/reports/Documents/2016/working-in-partnership-final.pdf (Accessed: 20th April 2017).
- Sowers, J.-A. and Smith, M. R. (2004) 'Nursing Faculty Members' Perceptions, Knowledge, and Concerns About Students with Disabilities', *Journal of Nursing Education*, 43(5), pp. 213-218.
- Speed, B. (2014) 'No standard offering of aid for dyslexia', *Times Higher Education*, (2146), pp. 20-21.
- Squire, C., Andrews, M. and Tamboukou, M. (2008) 'Introduction: what is Narrative Research', in Andrews, M., Squire, C. & Tamboukou, M. (eds.) *Doing Narrative Research*. London: SAGE.
- Stancanelli, J. (2010) 'Conducting an Online Focus Group', *Qualitative Report*, 15(3), pp. 761-765.
- Sterba, S. and Foster, E. M. (2008) 'Self-Selective Sample', in Lavrakas, P.J. (ed.) *Encyclopedia of Survey Research Methods*. Thousand Oaks: SAGE, pp. 807-809.
- Stewart, W. (2002) 'Electronic assistive technology for the gifted and learning disabled student', *Australian Journal of Learning Disabilities*, 7(4), pp. 4-12.
- Storr, H., Wray, J. and Draper, P. (2011) 'Supporting disabled student nurses from registration to qualification: A review of the United Kingdom (UK) literature', *Nurse Education Today*, 31(8), pp. e29-e33.
- Strnadová, I., Hájková, V. and Květoňová, L. (2015) 'Voices of university students with disabilities: inclusive education on the tertiary level – a reality or a distant dream?', *International Journal of Inclusive Education*, 19(10), pp. 1080-1095.
- Sugg, T. (2014) 'Successes and Challenges of a Nursing Student with Dyslexia', *Minority Nurse*, pp. 9-9.
- Sullivan, J. R. (2012) 'Skype: an appropriate method of data collection for qualitative interviews?', *The Hilltop Review*, 16(1), pp. Article 10.
- Sutinen, A. (2008) 'Constructivism and education: education as an interpretative transformational process', *Studies in Philosophy & Education*, 27(1), pp. 1-14.
- Taylor, K. E. and Walter, J. (2003) 'Dyslexia and occupation', *Dyslexia*, 9(3), pp. 177-185.
- Tee, S. and Cowen, M. (2012) 'Supporting students with disabilities – Promoting understanding amongst mentors in practice', *Nurse Education in Practice*, 12(1), pp. 6-10.
- Tee, S. R., Owens, K., Plowright, S., Ramnath, P., Rourke, S., James, C. and Bayliss, J. (2010) 'Being reasonable: supporting disabled nursing students in practice', *Nurse Education in Practice*, 10(4), pp. 216-221.
- Tetley, J., Grant, G. and Davies, S. (2009) 'Using Narratives to Understand Older People's Decision-Making Processes', *Qualitative Health Research*, 19(9), pp. 1273-1283.
- Tetley, J. and Hanson, L. (2000) 'Participatory research', *Nurse Researcher*, 8(1), pp. 69-88.
- Thomas, L. and May, H. (2010) *Inclusive learning and teaching in higher education* York: Higher Education Academy. Available at: <https://www.heacademy.ac.uk/resource/inclusive-learning-and-teaching-higher-education> (Accessed: 30th March 2017).
- Toma, J. D. (2006) 'Approaching Rigor In Applied Qualitative Research.', in Conrad, C.F. & Serlin, R.C. (eds.) *The Sage Handbook for Research in Education*. Thousand Oaks: SAGE.
- Tonge, J. and Treanor, D. 'UDL and Reasonable Accommodations – the systemic changes required in Higher Education in Ireland'. *presentation at AHEAD Conference 2017*, Dublin. Available at: <https://www.youtube.com/watch?v=Si5zL0hxz1Q&feature=youtu.be> (Accessed 22nd April 2017).
- Tops, W., Callens, C., Cauwenberghe, E., Adriaens, J. and Brysbaert, M. (2013) 'Beyond spelling: the writing skills of students with dyslexia in higher education', *Reading & Writing*, 26(5), pp. 705-720.

- Tracy, S. J. (2013) *Qualitative Research Methods: Collecting Evidence, Crafting Analysis, Communicating Impact*. Chichester: Wiley-Blackwell.
- Trier-Bieniek, A. (2012) 'Framing the telephone interview as a participant-centred tool for qualitative research: a methodological discussion', *Qualitative Research*, 12(6), pp. 630-644.
- UKCC (1994) *The Future of Professional Practice and Education: The Council's Standards for Education and Practice Following Registration*. London: UKCC.
- UKCC (1999) *Fitness for Practice*, London: United Kingdom Central Council for Nursing, Midwifery and Health Visiting.
- van Daal, V. and Tomlin, P. (2016) *The Dyslexia Handbook 2016*. Bracknell: British Dyslexia Association.
- van Jaarsveldt, D. E. and Ndeya-Ndereya, C. N. (2015) 'It's not my problem': exploring lecturers' distancing behaviour towards students with disabilities', *Disability & Society*, 30(2), pp. 199-212.
- Wahyuni, D. (2012) 'The Research Design Maze: Understanding Paradigms, Cases, Methods and Methodologies', *Journal of Applied Management Accounting Research*, 10(1), pp. 69-80.
- Wain, K. (1987) *Philosophy of lifelong education*. London: Routledge.
- Wajuihian, S. O. and Naidoo, K. S. (2012) 'Dyslexia: An overview', *Optometry & Vision Development*, 43(1), pp. 24-33.
- Walker, R., Cooke, M., Henderson, A. and Creedy, D. K. (2011) 'Characteristics of leadership that influence clinical learning: A narrative review', *Nurse Education Today*, 31(8), pp. 743-756.
- Walker, S., Dearnley, C., Hargreaves, J. and Walker, E. A. (2013) 'Risk, fitness to practice, and disabled health care students', *Journal of Psychological Issues in Organizational Culture*, 3(S1), pp. 50-63.
- Waterfield, J. and West, B. (2008) 'Towards Inclusive Assessments in Higher Education: Case Study', *Learning and Teaching in Higher Education*, 3, pp. 97-102.
- Watson, M., Peacock, S. and Jones, D. (2006) 'The analysis of interaction in online focus groups', *International Journal of Therapy & Rehabilitation*, 13(12), pp. 551-557.
- Webb, L. (2011) *Nursing communication skills in practice*. Oxford: Oxford University Press.
- Weedon, E. and Riddell, S. (2010) 'Disabled students and transitions in higher education', in Ecclestone, K., Biesta, G. & Hughes, M. (eds.) *Transitions and Learning through the Lifecourse*. Abingdon: Routledge.
- Wenger, E. (2009) 'A social theory of learning', in Illeris, K. (ed.) *Contemporary theories of learning: Learning theorists ... In their own words*. Abingdon: Routledge.
- Wharrad, H. J., Sanderson-Mann, J., McCandless, F. and Riley, F. (2012) 'Using reusable learning objects to raise awareness and disseminate research findings about the impact of dyslexia on placement-based learning', *Diversity and Equality in Health and Care*, 9(2), pp. 141-149.
- White, J. (2006) *Dyslexia in pre-registration nursing students: strategies for developing clinical competencies*. Doctor of Philosophy, Cardiff University, Cardiff.
- White, J. (2007) 'Supporting nursing students with dyslexia in clinical practice.', *Nursing Standard*, 21(19), pp. 35-42.
- Wiklund-Gustin, L. (2010) 'Narrative hermeneutics: in search of narrative data', *Scandinavian Journal of Caring Sciences*, 24, pp. 32-37.
- Willis Commission (2012) *Quality with Compassion: the future of nursing education*, London: Willis Commission.
- Willis, G. P. (2015) *Shape of caring review: raising the bar*. London: Health Education England.
- Willis, J. W. (2007) *Foundations of Qualitative Research: Interpretive and Critical Approaches*. Thousand Oaks, CA: SAGE.

- Wilson, A. L. (2009) 'Lifelong Learning in the United States', in Jarvis, P. (ed.) *The Routledge International Handbook of Lifelong Learning*. Abingdon: Routledge.
- Wilson, R., Ranse, J., Cashin, A. and McNamara, P. (2014) 'Nurses and Twitter: The good, the bad, and the reluctant', *Collegian*, 21(2), pp. 111-119.
- Worsley, R. (2012) 'Narratives and lively metaphors: Hermeneutics as a way of listening', *Person-Centered & Experiential Psychotherapies*, 11(4), pp. 304-320.
- Wray, J., Aspland, J., Taghzouit, J. and Pace, K. (2012a) 'Making the nursing curriculum more inclusive for students with specific learning difficulties (SpLD): Embedding specialist study skills into a core module', *Nurse Education Today*, 33(6), pp. 602-607.
- Wray, J., Aspland, J., Taghzouit, J., Pace, K. and Harrison, P. (2012b) 'Screening for specific learning difficulties (SpLD): The impact upon the progression of pre-registration nursing students', *Nurse Education Today*, 32(1), pp. 96-100.
- Wray, J., Barrett, D., Aspland, J. and Gardiner, E. (2012c) 'Staying the course: Factors influencing pre-registration nursing student progression into Year 2—A retrospective cohort study', *International Journal of Nursing Studies*, 49(11), pp. 1432-1442.
- Wright, D. (2000) 'Educational Support for Nursing and Midwifery Students with Dyslexia', *Nursing Standard*, 14(41), pp. 35-41.
- Wright, D. J. and Eathorne, V. (2003) 'Supporting students with disabilities', *Nursing Standard*, 18(11), pp. 37-42.
- Yakhlef, A. (2010) 'The three facets of knowledge: A critique of the practice-based learning theory', *Research Policy*, 39(1), pp. 39-46.
- Zhang, D., Landmark, L., Reber, A., Hsien Yuan, H., Oi-man, K. and Benz, M. (2010) 'University Faculty Knowledge, Beliefs, and Practices in Providing Reasonable Accommodations to Students With Disabilities', *Remedial & Special Education*, 31(4), pp. 276-286.

Appendix One: Ethical Approval



From Dr Duncan Banks
Chair, The Open University Human Research Ethics Committee
Email duncan.banks@open.ac.uk
Extension 59198

To Rachael Major, FELS

Subject *"The Challenges of Dyslexia in the Lifelong Learning Environment of Nursing."*
Ref HREC/2013/1573/Major/2
Red form
Submitted 29 December 2013
Date 8 January 2014

Memorandum

This memorandum is to confirm that the research protocol for the above-named research project, as submitted for ethics review, has been given a **favourable opinion** by the Open University Human Research Ethics Committee. Please note that the OU research ethics review procedures are fully compliant with the majority of grant awarding bodies and their Frameworks for Research Ethics.

Please make sure that any question(s) relating to your application and approval are sent to Research-REC-Review@open.ac.uk quoting the HREC reference number above. We will endeavour to respond as quickly as possible so that your research is not delayed in any way.

At the conclusion of your project, by the date that you stated in your application, the Committee would like to receive a summary report on the progress of this project, any ethical issues that have arisen and how they have been dealt with.

Regards,

Dr Duncan Banks
Chair OU HREC

100/00.4

dies

Dear Rachael

Thank you for attending the Ethics Committee meeting on Thursday 14 November, 2013 to discuss your application for the above pilot research study. At the meeting, the following documents were reviewed by the Ethics Committee:

- i) Letter from Rachael Major, Lecturer (Adult Nursing) [REDACTED] (dated 30 October, 2013);
- ii) Summary of the Project (dated 1 July, 2013);
- iii) Detailed Protocol for the Project;
- iv) Information for Participants;
- v) Participant Consent Form (version 1, dated 21 October, 2013);
- vi) Memorandum of 'provisional favourable opinion' Dr Duncan Banks, Chair, The Open University Human Research Ethics Committee (dated 30 October, 2013);
- vii) CV Rachael Major.

Members of the Committee were please to have had an opportunity to meet you, to hear your summary of the proposed study and to ask questions.

On behalf of the Ethics Committee, I am pleased to confirm that the Committee agreed to approve the pilot study.

Once received, I'd be grateful if you could forward a copy of the full Open University approval to [REDACTED], so that it can be held on file.

In order to track progress of approved studies, the Ethics Committee would be grateful if you could provide regular progress reports for the study (at least annually) and / or a final report following its completion. This should be forwarded to: [REDACTED]
[REDACTED] Executive Assistant (Committees), Health and Social Services Department,
[REDACTED]

The Committee and I wish you every success with your trial.

Yours sincerely



PP

Mrs Tracey McClean
Chairman, Ethics Committee



From Dr Duncan Banks
Chair, The Open University Human Research Ethics Committee
Email duncan.banks@open.ac.uk
Extension 59198

To Rachael Major, FELS

Subject *"The Challenges of Dyslexia in the Lifelong Learning Environment of Nursing."*

Ref HREC/2014/1573/Major/3

AMS/RED n/a

SRPP n/a

Submitted 1 August 2014

Date 10 August 2014

Memorandum

This memorandum is to confirm the research protocol for the above-named research project, as submitted for ethics review, **has been given a favourable opinion** by the Open University Human Research Ethics Committee by **Chair's action**.

Please make sure that any question(s) relating to your application and approval are sent to Research-REC-Review@open.ac.uk quoting the HREC reference number above. We will endeavour to respond as quickly as possible so that your research is not delayed in any way.

At the conclusion of your project, by the date that you stated in your application, the Committee would like to receive a summary report on the progress of this project, any ethical issues that have arisen and how they have been dealt with.

Regards,

Dr Duncan Banks
Chair OU HREC

Rachael Major
Lecturer (Adult Nursing)

lies

29 June, 2015

Dear Rachael

**The Challenges of Dyslexia in the Lifelong Learning Environment of Nursing
(Main Study)**

Please find detailed below information relating to the approval of the above study by the Ethics Committee.

The application was originally due to be considered at a meeting of the Ethics Committee scheduled to be held on Thursday 11 September 2014. However, due to the unavailability of some members, the meeting had to be postponed and availability was sought for an alternative date in October 2014.

It soon became apparent that it would also be difficult to convene a Committee meeting during October 2014. Therefore, on the basis that your proposal was a continuation of a pilot study previously approved by the Ethics Committee on 14 November 2013 and in order not to delay things any further, it was agreed that I approve the main study by Chair's action. This approval was granted towards the end of September 2014 and I apologise for not formally providing you with this confirmation until now.

For completeness, I can confirm that the following documents had been submitted to the Ethics Committee for consideration:

- i) Letter from Rachael Major, Lecturer (Adult Nursing), [redacted] [redacted] (dated 11 August, 2014);
- ii) Summary of the Project;
- iii) Detailed Protocol for the Project;
- iv) Information for Participants;

- v) Participant Consent Form;
- vi) Memorandum confirming favourable opinion (i.e. approval) from Dr Duncan Banks, Chair, The Open University Human Research Ethics Committee (dated 10 August, 2014);
- vii) CV Rachael Major.

Please feel free to contact me or [REDACTED] Executive Assistant (Committees), should you require any further information / clarification and I wish you every success with your study.

Yours sincerely



Mrs Tracey McClean
Chairman, Ethics Committee

Health and Social Services Department

street

Private & Confidential
Ms Rachael Major
Lecturer (Adult Nursing)

21st July, 2015

Our ref: TF/MT/LC

Dear Rachael,

Project: Experiences of Dyslexia in the Lifelong Learning Environment of Nursing

Thank you for submitting the research application form and accompanying information to the [redacted] Ethics Committee which took place on Thursday 16th July, 2015.

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research based on the very thorough information provided in your application. Please would you formally inform [redacted] (Head of Education, Learning and Development) that you've received ethical approval and that you are starting the study.

Also, would you kindly send us a copy of the poster you will be using to recruit participants as mentioned in your application.

We note in your application that you may signpost participants to helpful resources and we request that you wait until your research is concluded before doing this.

I would also like to convey the Committee's best wishes for the success of this project.

Yours sincerely

L de la Cour

PP Maureen Turner,
[redacted]
[redacted]

NOTE: Approval of the HSSD Ethics Committee is valid for 3 years from date of this letter



From Dr Duncan Banks
Chair, The Open University Human Research Ethics Committee
Email duncan.banks@open.ac.uk
Extension 59198

To Rachael Major, Faculty of Health, Psychology and Social Care

Subject *"Experiences of Dyslexia in the Lifelong Learning Environment of Nursing: a narrative approach."*
Ref HREC/2015/2060/Major/1

AMS (Red)
Submitted 15 July 2015
Date 15 July 2015

Memorandum

This memorandum is to confirm that the research protocol for the above-named research project, as submitted for ethics review, **has been given a favourable opinion** by the Open University Human Research Ethics Committee by **Chair's action** as it is thought to be low risk. Please note that the OU research ethics review procedures are fully compliant with the majority of grant awarding bodies and their Frameworks for Research Ethics.

Please make sure that any question(s) relating to your application and approval are sent to Research-REC-Review@open.ac.uk quoting the HREC reference number above. We will endeavour to respond as quickly as possible so that your research is not delayed in any way.

At the conclusion of your project, by the date that you stated in your application, the Committee would like to receive a summary report on the progress of this project, any ethical issues that have arisen and how they have been dealt with.

Regards,

Dr Duncan Banks
Chair OU HREC

Appendix Two: Information for Participants and Consent Form

Information for Participants:

Thank you for considering participating in this research study. Please read the following information carefully and ask any questions before signing the consent form. You are under no obligation to take part in the study, and no questions will be asked if you choose not to.

Aim of the study

The study is part of my Doctorate in Education. I am interested in if having dyslexia has affected you throughout your life, as a nurse and how you have engaged in continuing professional development.

What would I have to do?

I will ask you to complete a timeline of your experiences of education, learning and dyslexia during your lifetime so that you will have a chance to think about your experiences. You will be asked to take part in an in-depth semi-structured interview which will include asking to remember your experiences from the past including school experiences and diagnosis, as well as your current nursing and educational experiences. This interview will take place in a place of your choosing and may take 2 hours or possibly longer. I may need to speak to you again to clarify any issues that have been raised during the interview.

Once the interview has taken place, I will translate that interview into your story and ask you to read and verify it. This will not be a complete transcript of the interview but an interpretation of what you have said. You will be able to change or remove any information that you are not happy with.

I will then ask you to take part in an online discussion forum with another nurse who has also taken part in an interview to verify any themes that I have been able to identify from your stories. You will not meet the other nurse and both your identities will be protected by the use of new email accounts and false names. I will show you how to use the discussion forum if required.

What sort of questions will I be asked?

The planned questions within the interview are:

- Can you tell me a bit about your nursing career so far?
- When were you diagnosed with dyslexia and what was your experience of diagnosis?
- Tell me about your experience of learning in school, including any positive or negative experiences
- What made you decide to be a nurse?
- Can you tell me about your experience of nurse training?

- What support were you offered during your training both in theory and practice
- Who have you told about your dyslexia throughout your career and what influenced that decision?
- What forms of learning have you engaged in since qualifying and why did you choose them? (think about non-formal learning as well as formal and how you best learn)
- What support do you get now and from whom?
- Are there any particular areas of your work that you find more difficult because of the dyslexia?
- Do you have any strategies that you employ to help you overcome these difficulties?
- Are there any positive aspects or areas that you are better at because of having dyslexia?

However, as the interviews are semi-structured and narrative in nature these questions are only a guide. The most important aspect is that you feel able to tell your story.

Consent

You will be asked to give written consent to take part in the research. You will be free to withdraw from the project at any time without any adverse consequences, and you don't have to give a reason for this. If you do withdraw, I will discuss with you whether you want the information you have given me to date to be included in the research analysis on the basis of confidentiality described below. If you prefer your data removed it will be destroyed.

How will the information I give be protected?

Your data will be protected using the eight Principles of Data Protection ([REDACTED]), further details of which can be found online at <http://www.gov.gg/CHttpHandler.ashx?id=2393&p=0>. The audio recordings, transcripts and subsequent narrative stories will be held in password protected files. Any paper copies will be kept in a locked file. The files will be destroyed once the research project had been completed and published.

How will my identity be protected?

It is very hard to guarantee that nobody would be able to identify you from the information that you will give. However, I will do my best to protect your identity. This will include the use of pseudonyms and limited use of information such as role and area of practice, for example, senior nurse might be used or a staff nurse from a medical ward. You will have agreed your story before the information is used in the research and any information that you want to be removed will be so. Your identity on the online discussion forum will be protected by the use of novel email accounts that you will be provided with. This will allow you to access a dedicated site on the Institute Learning Pod that will only be accessible to the participants in the study, myself and the E-

learning Coordinator. She will not know who has been allocated to the email addresses when setting up accounts to access the site.

Confidentiality

Some of the information that you tell me may be personal. You may be happy for that information to go into your story, but if you are not this will be removed at your request. Any information that you disclose during the course of the research but do not want to share will be held in confidence, including having dyslexia. However, you must also be aware that if you disclose an issue of poor or unsafe practice I am professionally bound by the Nursing and Midwifery Council to disclose this. I will encourage you to speak to the appropriate person or use the appropriate reporting mechanism initially but may have report a safeguarding incident if you don't.

Where will my information be presented?

The data from this project will form part of my Doctorate in Education and therefore will be seen by my supervisor, co-supervisor and those marking my work. The research will be presented to the Open University and a copy will be kept in the library and the Institute library and may be accessible online. The research may also be published in nursing and educational journals. However, the information that you have given will be anonymised before it is included in the study.

Raising Concerns or Complaints

If you want to make a complaint or raise concerns about how the research is being carried out, you can contact:

Dr Cindy Kerawalla
Ed D Programme Leader
Director of the Children's Research Centre
Faculty of Education and Language Studies
Open University
Walton Hall
Milton Keynes
MK7 6AA

Thank you for taking the time to read this information. I am happy to answer any further questions that you may have. Please take your time in deciding whether to take part in the study and contact me when you are ready to make a decision either way.

Rachael Major

[REDACTED]
[REDACTED]



Website created for non-local participants to access information prior to consenting to participation in the study. Website address <http://rmajor8.wix.com/nursing-and-dyslexia>

The Challenges of Dyslexia in the Lifelong Learning Environment of Nursing.

Consent Form

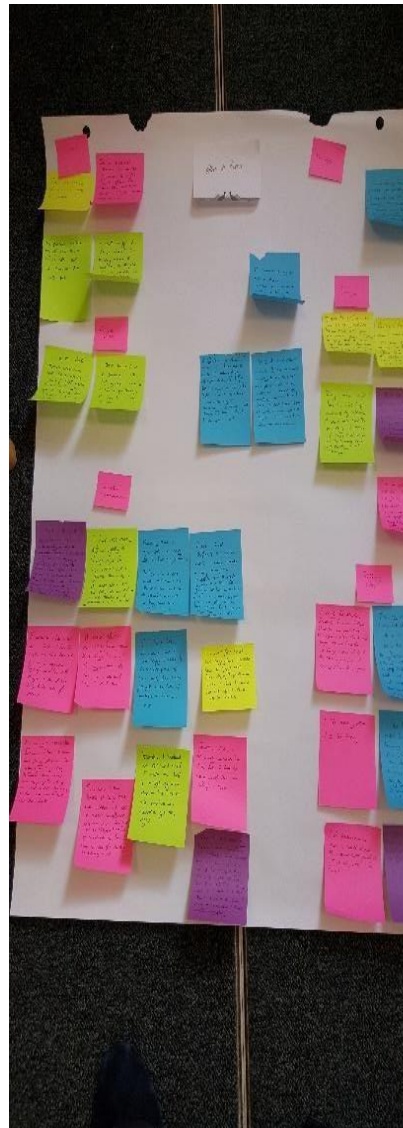
Please initial box

1. I confirm that I have read and understood the information sheet for the above study. I have had the opportunity to consider the information, ask questions and I have had these answered satisfactorily. ☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason. Any information that I have given will be destroyed on my request. ☐
3. I understand that personal information collected in this study will be confidential, anonymous and protected. ☐
4. I agree to take part in an interview and any subsequent follow-up interviews to clarify the information ☐
5. I agree to have my interview voice recorded ☐
6. I agree to take part in an online discussion forum to verify the themes ☐
7. I agree to the information that I give to be used as part of a Doctorate in Education research project and in any subsequent publications for educational purposes ☐
8. ☐
9. I understand that the eight Data Protection Principles Protection (Data Protection XXXXXXXXXX 2001) will be followed. ☐

Name of participant Date Signature

Name of person taking consent Date Signature

Appendix Three: Template Analysis



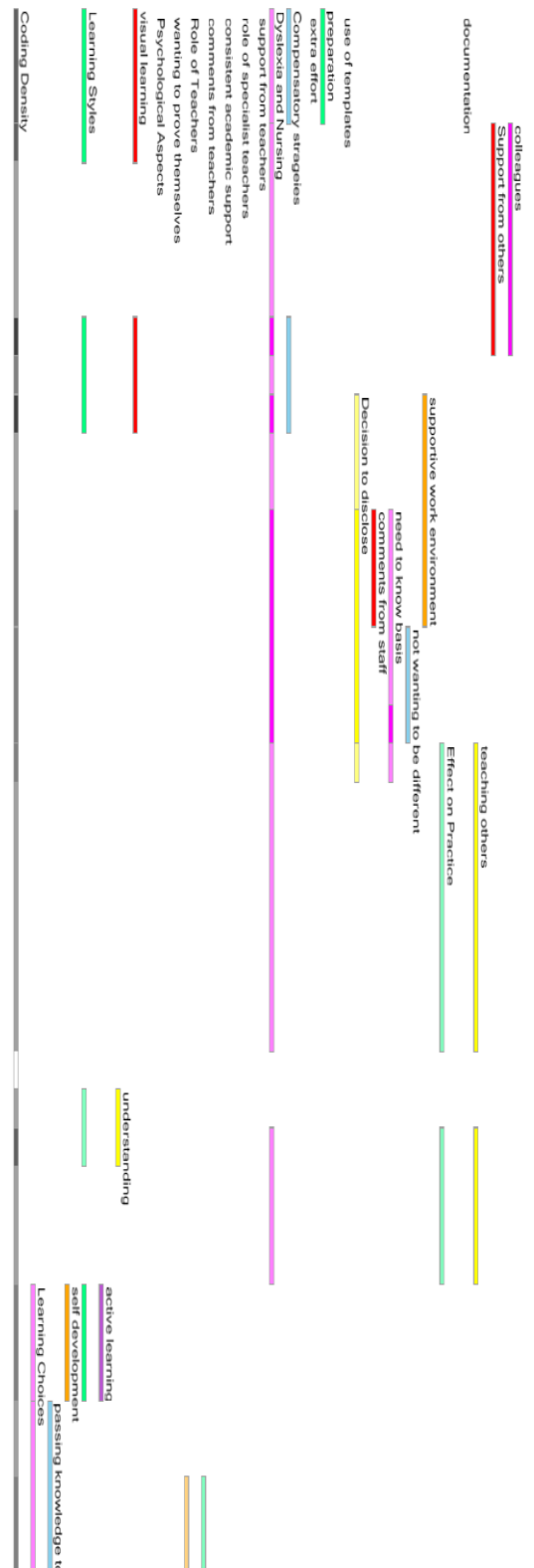
Above is a sample of pictures showing the initial stages of template analysis. Participants were allocated a colour of post-it note. Each page was a theme, with subthemes indicated by small pink post-its. The participants' stories were read and the coda identified and highlighted. There were then transferred onto the post-it notes. This continued until all the story had been coded. The use of this manual method of coding facilitated the development of the initial template, as the post-it notes could be moved as well as being a very visual method. Once the template had been established I was then able to code using NVivo more effectively and without the experience of over-coding. An excerpt of a narrative story following coding with NVivo is presented on the next pages. The coding stripes are shown along the side, as this is the way that NVivo indicates where the codes have been applied.

Excerpt of Dom's Story Demonstrating NVivo Coding (story included with permission from the participant)

I'm a very visual presenter. So I'll often explain this to people saying I will write this up formally but for me to be able to present this to you, if you don't mind, I'm going to do it this way. It is because I'm a very visual presenter and I think it is because I'm dyslexic and it's the way I remember stuff. So there will be a point kind of early-ish when I'll just kind of say I'm sorry this isn't the way you want it. I will put it in a way you want it but for the purpose of this meeting or for this whatever this is how it's going to come across. And people have got very used to me turning up with- So, for example, I was on the education and guidelines group for one chance to get it right. So I turn up for this big meeting at the Department of Health with my pens, with my felt pens and my big A3 pad doing a mind map of my minutes at the meeting. Now I've got much more confident to say that's the way I can do this stuff and I don't care if people are looking at me going why are you not doing it on your laptop or on your tablet? But, yes, people do get to find out, A, because they notice the typos after a while, and, B, because I do actually explain to them why I'm not being frivolous; it's just the way my brain communicates with itself.

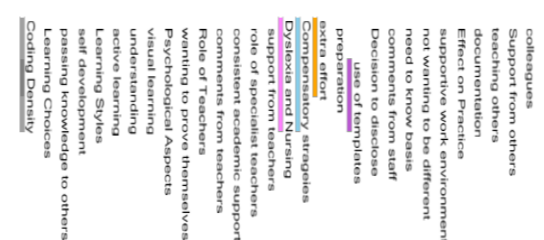
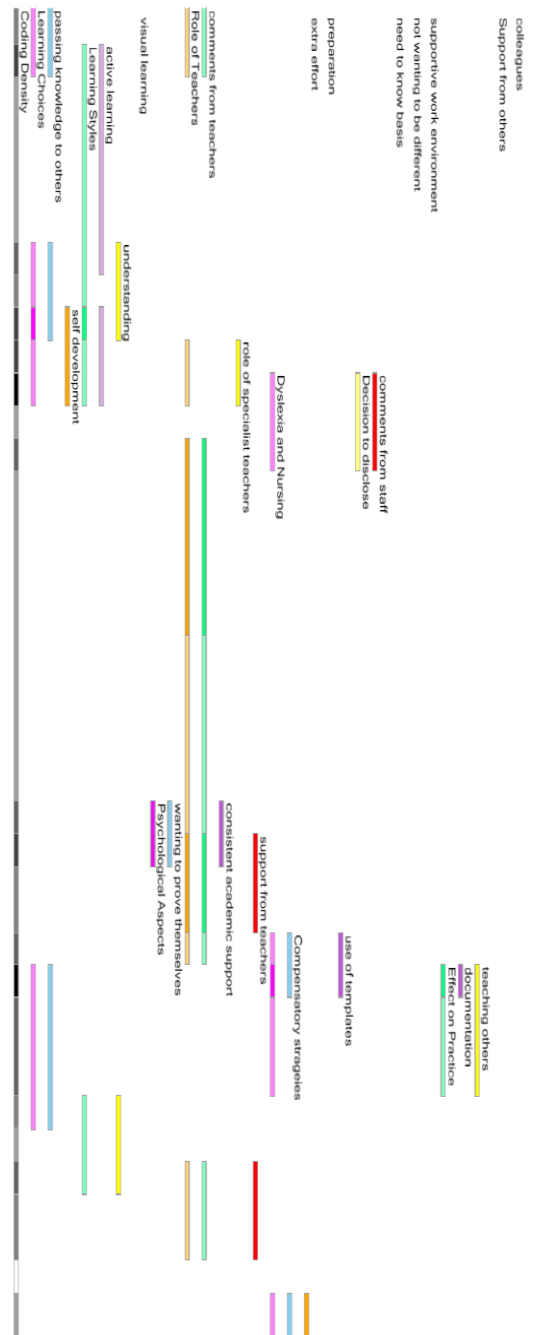
I would definitely not have said that I was dyslexic as a student or new staff nurse because that felt like it was about me when actually the work is about the patients and their families. It's not about me. So, only if it got in the way of care. I do recall that, actually, sometimes when I was explaining something with patients, I often would do it with a blank piece of paper and pictures and, actually, quite early on, even as a third-year student nurse, I remember working in A&E at [name] and working at paediatric A&E and bringing in all the felt pens and things to help explain to children what was happening to them and also for them to be able to express what colours it made them think. What you've stimulated me to remember is that from very early on I've kind of used it as a communication tool. But only for the benefit of patients. It's not about me; I'm just wondering about if this way would help. But it doesn't help everybody. Because some people want written bits of paper and something formal. But I think maybe that's what the dyslexia has done is given me the confidence to find another way to present information and communicate because I know I get information in other ways so maybe other people might as well.

Being able to engage in learning makes a difference to my learning because again if it's something that you are interested in but also something that makes a difference to the patients you care for. It sounds all- It's so very nursy, isn't it? But it really is, you know? It's if I can make a difference to the patients I care for and leave a legacy for when I've gone. Because I think that for me is really important. The legacy in terms of I don't want something to be just about [Name]; I want something that the rest of the team can then say,



actually, you know, this is a good idea; we can carry on doing it, blah di blah di blah, and we'll adapt it and change it as needs change. So, yes. And I think the reason why my postgraduate diploma and my master's then made me realise that I could achieve something academically is if you focus on something that you really enjoy, and for me, to enjoy intellectually, I was fascinated, absolutely fascinated by the different types of grievance support and the different models, but also then how can I translate this and make this relevant to practice and to help people? Even when you don't understand something, I'm just going to push on here because, actually, this isn't going to make a difference. And, you know, and I got a distinction in my master's and it completely threw me. I had no idea that it was at that level. I was actually just really, really, really enjoying it. And again the tutors had no idea at all. I didn't talk to them about dyslexia again because, again, I think the other thing is you start to get all this advice from people who don't really know. And start telling you, ooh, have you considered changing- So, I'm forever getting told I mustn't use a particular type of font. So, when I say, actually, that's the font that I can understand, they say, well, no, people with dyslexia find this font better. But I'm like- I've got dyslexia and I don't find that font- Or have you tried particular glasses or have you tried this? And I kind of think you're just talking out of your- that's just something that you've read. This is my experience and if you were, that would be fine. Or if you're actually found out what I found difficult first, then I would be prepared to listen to what you're saying. I still have it with my supervisors now; telling me what dyslexic people find helpful isn't helpful. Have you read somebody else's thesis? Yes, of course I've read somebody else's thesis. What I want is for you to tell me what is right in this paragraph. Don't tell me what's wrong; tell me what's right, so I can repeat it, as opposed to- And, actually, I would say from my master's onwards with academic supervision, there's a lot of what's wrong. With me, I need to know not as in I need praise; I need to know what is working, because then I complete that structure. Because I recognise that structure. I teach a lot of communication skills and all- kind of in a pot-handed version of that is I also teach a lot of how not to do stuff, because I think you need to be able to understand what is wrong as well as understand what is working, because that helps you kind of, you know, it's the right-left brain thing, isn't it? I can get it conceptually, then I can start to analyse it a little bit more intellectually. But I need to see what's good and what's bad and why. So I would certainly say with my master's and actually with my Doctorate now is that the irritation is being told what would help, without really finding out what I need at this level. You know, my master's was an epiphany for me in the sense that I can write at that level but the difference between a master's and a Doctorate writing is

just- I mean, you get there. You do get there and I'm now getting there but it's taking me an awful long time and I have to keep on reading good examples to work out how to say things.



**Appendix Four: Screenshots of Asynchronous Online Discussion
Forum Pages**

Course: Dyslexia research + theinstitute.gov.sg/course/view.php?id=291

Navigation

Administration

Search forums

Latest news

Upcoming events

Recent activity

The Learning Pod

Rachael Major

Introduction

Thank you for taking part in my research. All names have been changed to help protect your anonymity. However we live in a small professional community and some information may lead you to suspect who is involved. All information posted on this site should remain confidential and only be used within the research. You can amend any comments that you have made should you wish on the site or contact me if there is anything that you don't want me to use.
If anything that is posted causes you concern or raises old demons, please contact me if you want to talk things through on XXXXXXXX or email XXXXXXXX

Participants

15 nurses were interviewed, although one subsequently withdrew from the study leaving 14.
3 are male and 11 female
Number of years qualified ranged from 2 to 35
Highest academic qualification ranged from Diploma to working towards PhD
Participants came from a variety of backgrounds from education, specialist practice, acute to long term care. 2 participants had adult and paediatric qualifications, one learning disability and adult, two mental health and 8 adult.

Method of Data Analysis

Having transcribed your stories and made any amendments that you have asked for, I have looked for the themes that have run through them. I will now let you know what the themes are that I have found. They are found in the section below for you to discuss and add to if appropriate.

What I would like you to do next

Your continued contribution is really important to me. Below you will see the list of themes that I have identified in the PDF documents attached. Please could you read through them and see if you agree or disagree with them. Some may not be your experience and that is fine, some may trigger some thoughts that we did not discuss in the interview. I have not been able to include everything that you have told me as there is so much!

Below each section there will be an icon with two faces on it. Please could you click on this discussion forum and post your comments. You can also comment on others comments and this will add to the richness of the information that you have given me. **You will have 2 weeks to do this.**

Please comment on

1. **From your experience do you agree/disagree with the themes (or anything that you feel has been wrongly attributed)**
2. **Was there anything that surprised you that has been identified**
3. **Is there anything that has not been addressed**
4. **having read comments from others is there anything from your experiences that you would like to add**

I have also added a general discussion forum below in case there is a general comment that you want to make that is not related to the themes

Thank you again for your contribution. I am humbled by the trust that you have put into me by sharing your stories.

uoi

EBIL

tion

SW

ch to

- SM-

vent

☐

Kuzin

